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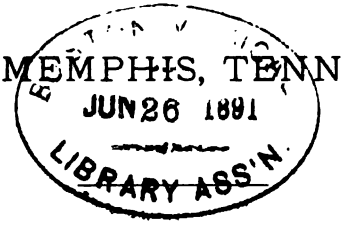

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HÆMATURIC CINCHONISM, COMMONLY CALLED MALARIAL HÆMATURIA.

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Physicians are very apt to look with distrust upon an innovation either in theory or practice, and it is well that they are so in the main. But I do think as a class they are less apt to believe truth when they know it to be such, or less willing to join hearts and hands in an earnest endeavor to find the only true basis upon which the practice of their science can be predicated, than are other men. Most men by nature are conservative, and an education in what direction soever, is likely to leave an impression for life. Hence the difficulty in true progress. But considering the fact that physicians who are competent to carry on systematic experiments and take intelligent observations thereon, are generally the most liberal, I do the more cheerfully undertake the task of pressing the claim of a new theory. I refer to the one set forth by Dr. R. S. Williams, of Mt. Meigs, Ala. The theory is new to me,

and I can find no previous mention of it in literature. The question and theory is this: Is there such a disease as malarial hæmaturia? Dr. Williams denies the existence of such a disease *per se*, but claims in his theory (published in the *Progress* of Sept., 1888, I believe) "that the symptoms giving origin to the varied nomenclature of this so-called disease, are the result of the toxic effects of quinine in a specific form of hæmoglobinuria, the result of malaria." (I copy from a letter and not from the *Progress*.) Furthermore, he denies the existence of a case of malarial hæmaturia where quinine or some preparation of cinchona had not been previously given. He of course differentiates hæmaturia of puerperic origin.

My observations and limited experience have convinced me that the doctor is right or nearer so than any of his professional brethren who have yet placed themselves on record. The disease is one of such terrible fatality under the present theory and practice, that a physician is warranted in almost any conscientious experiment upon one of these patients. I am of the opinion that the disease is very largely on the increase, and that as the price of quinine diminishes and the doses increase to an absurd and criminal quantity, the climax will be reached and a reaction will set in very much to the prejudice of a most excellent drug. Let physicians take heed that the laity do not precede them in this discovery. Having no history of the disease, and no statistics for or against, I quote a saying common among "old swampers" "that doctors have cured congestion, but have brought in something worse that they can't cure," namely, hæmaturia. This is of little value in a paper upon scientific principles, but I take it as an indicator. They have noticed the decrease of mortality in congestion under the quinine treatment, and being wiser or more observant than the physician, have noticed the increase of a disease which they jestingly say "the doctor has brought in," little suspecting the truth of their saying.

I came fresh from the lecture-hall steeped in the learning of Flint and of Loomis, having listened to the lectures of a man for whom I have the greatest respect, and appreciate and honor more every day, determined to be orthodox and conservative. But facts forced me from all their teaching on

this subject, and I had to learn anew. I learned that the practice of giving quinine in so-called malarial hæmaturia, either by the mouth, rectum, or hypodermatically, was useless and I suspected, detrimental. But it was to an accident that I owe anything like certainty. I had seen some half dozen cases of the disease in my own and the practice of others all treated with quinine after the most approved style and all ending fatally. I was engaged with a case of hæmaturia when I was called to see another, eight miles away. This last case was a Scandinavian ditcher, in the employ of Purcell & Grace, levee contractors. He had gone through with the usual experience in all these cases—a siege of chills and quinine. But in spite of quinine, the chill came on and after the rigor, a scanty flow of very thick, dark urine. My experience had taught me to recognize this as a very grave symptom. He was in a semi-comatose state and could understand nothing I said; partly from coma, partly because he could not understand English except in a very limited degree. I had little or no hope of the case, but administered ten grains of calomel, and left five more to be given during the day in two doses. I left quinine in eight-grain doses to be given every hour. The nurse, an ignorant Dutchman, could understand scarcely anything I said. I returned to my first case, and was closely occupied with him for two days, when death ensued. I then returned to see the "ditcher," who to my surprise, was up and able to work some. The nurse gave me back the quinine, saying he had forgotten how to give it. I put it in my pocket determined not to use quinine again in hæmaturia, except under protest. The next case I saw, was an Irishman in the employ of W. O. Flynn & Co., levee contractors. This was not a violent case, and soon yielded to calomel alone. My next case was a woman, American born, whom I had been treating for several complications, but who of late had been suffering from intermittent fever. This had developed into a congestive type, and to prevent a return, I had been administering heroic doses of quinine, when suddenly hæmaturia with its characteristic symptoms, appeared. Discontinuing the quinine, I resorted to calomel. She was soon relieved.

this: Withdraw the cause, quinine. Eliminate as rapidly as possible all quinine that may remain in the system, and meet emergencies as they may arise.

The practice known as the "Malone treatment" which is justly gaining ground in the "bottom country," is good. But with all due respect for its author, Dr. G. B. Malone, I think the theory is erroneous and unscientific. He too, if I mistake not, considers the disease one of purely malarial origin, and that the hyposulphite of sodium has a special action on this form of the disease. But so far as my observation goes, this or no other form of sodium has any effect in any other type of malarial toxemia, beyond that exercised by any safe purgative. As all writers recognize the fact that malarial diseases are one and the same in origin, and only differ in degree, or take special forms owing to the idiosyncrasies of subjects, it is hardly scientific to say that the hyposulphite of sodium has a special action in a certain degree of poison. I do not hesitate to say that the Malone *treatment* is correct in that it is a speedy, safe way of eliminating quinine from the system. But it is of no more value than Epsom salts, calomel, Rochelle salts, or any other hydragogue cathartic. So to sum up the whole matter in a few words, we, in so-called malarial hæmaturia, are dealing with quinine poisoning in a certain state of the blood, produced either by malaria, an idiosyncrasy in the patient, or the acccumulative effect of the drug itself. My inclination at present, is toward Dr. Williams' theory of "hæmoglobinuria, the result of malaria."

It is to be hoped that physicians will carefully look into this question, and see what it is worth. I believe I am propagating truth, but am open to conviction provided a more reasonable theory is advanced. But certainly the old one must fall.

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DEPARTMENT OF

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THE TREATMENT OF APPENDICITIS BY EARLY LAPAROTOMY.*

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Dr. Senn of Milwaukee, in a paper published in the *Jour. of the Amer. Med. Association*, November 2, 1889, and Dr. McBurney of New York, in a paper read before the New York Surgical Society, November 13, 1889, make contributions to the subject of the successful treatment of appendicitis which indicate that the advance in the management of affections of the appendix, proposed by Treves in the early part of the present year (*Lancet*, Feb. 9, 1889), has taken a permanent place in surgical endeavor, with much promise of advantage in future attempts to control this so often fatal affection. Both surgeons call attention to the fact that the primary and essential condition present in the cases of so-called typhlitis, perityphlitis, or paryphlitis, is an affection of the vermiform appendix, inflammatory or ulcerative, with tendency to perforation or gangrene. Dr. McBurney would elide from the medical vocabulary these hitherto commonly used terms, and would substitute for them, simply the term appendicitis, as more correct pathologically and less likely to obscure the indications for treatment. He clearly states the dictum, that all this class of cases are intra-peritoneal in their origin and throughout their course, and early resort to ablation of the diseased appendix is a comparatively safe method of preventing the development of more redoubtable symptoms. Dr. Senn calls attention to the fact that in many

* Annals of Surgery, Dec., 1889.

cases the development of so-called perityphlitis is preceded by a well-marked complexus of symptoms pointing directly to the existence of appendicitis. Repeatedly recurring attacks of pain, tenderness and induration in the region of the appendix, indicative of the presence of chronic disease thereof, with occasional exacerbations, are especially to be regarded as warnings of impending danger. If the condition is recognized before dangerous complications have developed from perforation and general septic infection, he also recommends extirpation of the appendix, assuming that it can be done at this early date with comparative ease and almost perfect safety. Dr. Senn recites two cases in which this practice has been resorted to, once by himself, and once by Dr. Hoegh of Minnesota, at his suggestion. In both cases there was a history of repeated previous attacks of the local symptoms recognized as indicating the presence of appendicitis. In both the appendix was removed with facility, and uninterrupted recovery was secured. In both the mucous lining of the organ was deeply ulcerated.

Dr. McBurney relates eight cases in which he has done laparotomy and excision of the appendix upon patients who presented well-marked symptoms of appendicitis, prior to any development of symptoms of perforation. All recovered without unfavorable symptoms, except one who died. The latter case was one in which the appendix was buried in a mass of inflammatory exudate, demanding for its complete removal an amount of violence, exposure and handling of the parts that provoked the fatal result. The author in another such case would be content to leave the organ *in situ* after making provision for drainage.

Chronic appendicitis is characterized by acute exacerbation of short duration, the attacks, of greater or less severity, occurring at intervals of a few months or weeks. Between the attacks the patient may be in perfect health, unless the attacks recur with great frequency, when impairment of the digestive functions produces general ill health. According to Senn, recurring attacks of pain in the region of the appendix with a circumscribed area of tenderness over the same point, are presumptive evidences of the existence of appen-

dicitis, and if the other symptoms and signs point in the same direction, laparotomy ought to be performed as indicated.

As a matter of course, the strictest asepsis is predisposed in the conduct of the operation recommended. The incision should be directly over the center of the cæcum, about four inches long, extending to with one inch of Poupart's ligament. The peritoneal cavity having been opened a compress should be packed about the cæcum, so as to prevent prolapse of the small intestine; in some cases the appendix will come into sight at once, in others it will have to be sought for; the raising of the lower margin of the cæcum, generally, will suffice to expose it. The mesentery of the appendix is next to ligated insections as far as to the cæcum: adhesions if present, are to be separated and bleeding points tied; finally the isolated appendix is tied around its base close to the cæcum with silk, and the organ cut away about one-quarter of an inch below the ligature.

As to the treatment of the stump, Senn recommends first that it be carefully disinfected, then that it be dusted with iodoform, and finally that it be shut in by drawing the adjacent serous surfaces of the cæcum over it and securing them with a number of Lembert's sutures. Drainage in these cases is unnecessary.

In corroboration of these views of Treves and Senn, Baldy of Philadelphia, has recently published (*Med. News*, Nov. 23, 1889), an account of three cases in which, having done laparotomy for diseases of the uterine appendages, he found also the appendix so diseased as to call for its excision. In each case good recovery ensued with subsequent good health.

Notwithstanding these cases of Senn and McBurney, the indisputable soundness of their pathology and the brilliant success of their own efforts, it ought not to be forgotten, nor will it be when the final judgment of the profession is made up, that by far the greater portion of cases of acute appendicitis, those which have hitherto been classed as typhlitis or perityphlitis, recover spontaneously and permanently, without suppuration, at least without intra-peritoneal suppuration.

The cases classed by Senn as chronic appendicitis form a

group by themselves; spontaneous and permanent recovery, however, from this condition is also not infrequent.

A very great responsibility, therefore, must attach to the surgeon in any given case in deciding upon laparotomy and excision of the appendix. It is evident that at present, at least, it could only be proper for one who was a perfect master of a septic abdominal technique to offer such a procedure as less dangerous than the policy of delay and palliation. It is doubtless true that if in all cases in which there were present symptoms pointing to trouble with the appendix, the abdomen should be opened immediately and the appendix excised, the occurrence of immediate perforation would be anticipated in some cases, the production of general peritonitis would be prevented, and lives would be saved; on the other hand, many would be subjected to the hazards of laparotomy and excision in which there was no danger of perforation and which would have recovered spontaneously if let alone. The general principles that govern surgeons with reference to all operative work must, however, be applied here, and in any given case the probabilities of every kind must be given due weight in coming to a conclusion. Surgeons may still hesitate and defer operative attack in case of appendicitis until well-defined evidences of suppuration are obtainable, and their course cannot be said to be otherwise than prudent; surgeons may boldly expose the appendix and remove it upon the first symptoms of inflammation declaring themselves, and as long as their results are as favorable as those of Senn and McBurney, their course must be considered justifiable. The next few years will doubtless accumulate an abundant experience in this new path upon which more safe conclusions for general guidance may be based than can be upon the very limited experience as yet available.

Professor White of Philadelphia reports in the *Annals of Surgery* the successful removal of a vesical calculus weighing nine and one-half ounces. The supra-pubic operation was performed.

OLD FRACTURED PATELLA—SUCCESSFULLY WIRED—REPORT OF CASE.

W. B. ROGERS, M.D.
Professor Principles and Practice of Surgery and Clinical Surgery, in Memphis Hospital Medical College.

J. Wilbur, male, white, thirty-five years of age, well-muscled, on January 31, 1888, just on reaching the bottom of a flight of steps, tripped, and in the effort to regain his balance felt his right leg give way, and he fell to the floor striking on the left side. An effort was made to get on his feet, when he found his right leg useless. He was placed on a lounge in the office, and upon my arrival I detected a fracture of the right patella, transverse, and the line of fracture divided the bone in two nearly equal parts. No bruising or contusion was discernible and the description of his accident went to show it a fracture from muscular contraction. His quadriceps was quite powerful, and at least one inch of space lay between the two fragments. He was taken to his room and the limb placed in fracture-box. The swelling from intra-articular effusion was very considerable, but under the pressure of a rubber bandage it had nearly all disappeared by the sixth day, when by means of strips of adhesive plaster, I succeeded in bringing the upper fragment down to the lower one. A plaster Paris splint fenestrated, was applied, and additional strips of plaster for drawing down the upper fragments were applied, and renewed as often as indicated. At the end of twelve weeks the fragments were joined by a ligamentous band one-half inch in length. He went on crutches several weeks, then with a cane. All the time however the limb felt to him unreliable, and while crossing the room, floor level, he felt a giving way and fell to the floor. The band did not give way entirely, but the fragments were still further separated, and the limb was practically of little value, unless he continued to wear a splint. I advised wiring the patella; he consented, and came into my private infirmary, where, Nov. 5, 1888, I performed the operation which I had the pleasure of witnessing in the hands of Dr. Phelps of New York.

Incision was begun at the center of the inner aspect of inner condyle and carried across the anterior aspect of the joint, terminating at center of outer aspect of external condyle, thus freely opening the joint on the anterior aspect. The ligamentous band joining the fragments was next excised, and with a curette the fractured surfaces of both fragments were cleansed of all tissues down to fresh raw bone. The joint cavity was irrigated with bich. solution, washing out all blood clots, scrapings, etc. The capsule of the patella having been turned back from external surface of each fragment, a bone drill was entered half an inch from edge of fracture or external surface of upper fragment and made to emerge in the line of fracture just above the articular surface of the bone. The drill was then passed obliquely in the same manner through the lower fragment, and a silver wire about one line in diameter was made to traverse the canals in two fragments. The fragments were next drawn well into apposition, the wire twisted and cut off, the ends turned down and driven into the line of fracture. The next step was to secure thorough drainage through the two pockets, one lying at inner anterior aspect of the tibia, the other just in front of fibula. In each of these a grooved director was passed and an incision made through the skin to admit a pair of forceps with which drain-tube was seized and drawn into place.

In closing the wound, care was taken to first carefully sew up the capsule of the joint, that is, the fascia which covers the patella and spreads across the front of the joint. This was done with continuous catgut suture, going over the line of suture repeatedly so as to render it water-tight. At this point the nozzle of the irrigator is inserted in one drain-tube and the joint flushed, thoroughly cleansed, and the above mentioned water-tight suture-line tested. It is very important that this capsule be well closed to prevent the ingress of pus to the joint cavity in case suppuration should take place between the capsule and the integument; and to still further provide for suppuration in this locality a small drain tube is placed across the joint, over the line of suture closing the capsule. The incision in the integument was next closed by

continuous catgut suture, and after dusting the parts over with iodoform and flushing repeatedly the joint cavity, a piece of protective with holes cut for drain tubes was applied. Next, all was enveloped with iodoform gauze, and then cotton and bandage, and limb placed in trough of plaster Paris, previously prepared. I was assisted by Drs. F. J. Merriwether, Stewart and Krauss.

The patient complained of much pain during four or five days, and morphine was given freely. Dressing was removed on second day and small drain tube taken out, but the two that drained the joint were only drawn out one-fourth of an inch and cut off; dressings reapplied.

Two days later, tubes removed. On the tenth day all had healed, no suppuration having taken place. The limb was kept in plaster Paris splint nine weeks, then patient was put on crutches; about five weeks later crutches laid aside; on Feb. 13, 1889, went to work.

Examination today. He walks well, with no impediment or sense of insecurity, the right leg can be flexed to a right angle, and in that position will sustain his weight, 147 pounds. He finds some difficulty in descending steps, but none walking on ordinarily level ground.

INTESTINAL OBSTRUCTION.—Jonathan Hutchinson gives the following (*Arch. of Surgery*) as the principles which guide him in all cases of acute intestinal obstruction: He believes that in all cases in which obstruction is recognized, whether the symptoms are severe or mild, one of the first measures adopted should be the administration of an anæsthetic under the full influence of which intestinal spasm will be relaxed, and the passage of scybalæ, gall-stones, or other impediments favored. While anesthetized, the patient's abdomen should be carefully examined by the surgeon, who should also use enemata, and practice abdominal taxis. An accurate diagnosis of the cause of obstruction is not often possible, and the early use of anesthesia and taxis is successful in many cases, whatever the causation, and is prejudicial to but few. If these measures fail, and the symptoms increase after anesthesia, exploratory laparotomy should be resorted to.

Intussusception in infants under one year should be treated wholly by taxis and enemata, as the prospect of recovery after abdominal sections at this age is exceedingly slight. In older children laparotomy is probably the best treatment. If the diagnosis is the plugging of the gut by a gall-stone, belladonna should be freely administered, and if pain is severe, prolonged anesthesia; also systematic efforts should be made to force enemata beyond the ileo-cæcal valve. Under no circumstances does this latter condition justify an operation, as with the above measures the probabilities of recovery are great. In cases of long duration, either the "rest, opium and starvation" plan, feeding entirely by the rectum, or repeated recourse to taxis and large enemata, should be adopted.

Mr. Hutchinson describes his method of taxis thus: Under full anesthesia, the bladder and the bowels being empty, the surgeon forcibly and repeatedly kneads the patient's abdomen, pressing its contents in all directions. The patient is then turned on his abdomen, upheld by four strong men, and vigorously shaken. Following this he is supported by the feet, copious enemata given, and, while in this position, vigorously shaken upward and downward. The latter Mr. Hutchinson considers exceedingly important. However rough such treatment may seem, it is in no sense unscientific, but thoroughly rational, and its efficacy is attested by the report of Mr. Hutchinson's cases.—*Canada Lancet.*

AMPUTATION AT THE HIP-JOINT.—In *Brit. Med. Jour.*, Thomas Moyles, F. R. C. S. I., gives the following method of amputation at the hip-joint which as yet he has practiced only on the cadaver: One inch below Poupart's ligament, and half an inch externally to the femoral artery a stout nickel or steel skewer is thrust straight through the soft parts from before backward; it passes just to the inner side of the neck of the femur and emerges a little above the gluteal fold. A strong piece of India rubber is twisted in a figure-of-8 over the projecting ends of the skewer, thereby compressing the femoral artery, above the origin of the profunda, and the sciatic artery. A transfixion knife is now passed in the same direction as the skewer, at a little lower level. "A straight ver-

tical incision, about two inches long, is now made with the knife, which is finally carried inward, making a tapering flap from the tissues on the inner side of the limb." The limb now being forcibly abducted, the head of the femur is easily removed from the acetabulum. The blade is now carried above and then to the outside of the great trochanter, keeping close to the bone, and a flap similar to the first is made on the outside of the limb.

A second pin and elastic ligature may be made to encircle the outer flap before it is completely divided. The vessels can be tied at leisure.

The advantages to be expected are: 1, extreme rapidity; 2, complete control of hemorrhage; 3, the wound is vertical, therefore allows for drainage; cleanly cut, therefore ensures apposition and prompt union; away from the anus, and therefore not liable to infection.—*Weekly Med. Review.*

TREATMENT OF SMALL CYSTIC TUMORS BY INJECTION OF CHLORIDE OF ZINC.—Dr. A. Landerer (*Deutsche Zeitschrift fur Chirurgie*, Bd. 29, Hefte 5 und 6, 1889), has for about a year, in the treatment of small cystic tumors, such as hygromata, ganglions, ranula, etc., injected a one per cent. solution of chloride of zinc, employing from twenty-five to thirty-five minims, according to the size of the growth. He does not use any preliminary cocaine injection. Occasionally the injection must be repeated, especially if a sufficient quantity is not used on the first occasion. The resulting symptoms are scarcely noticeable. There is little or no pain. The cyst becomes hard, and is surrounded by a dense edema, which disappears after a few days. A Priessnitz dressing (hydropathic compress) is agreeable to most patients. During the next four or five weeks the cyst shrinks, and finally disappears entirely.

Landerer has treated in this way, five ganglions of the dorsum of the hand; a diverticulum of the sheath of the flexor tendon of the fourth finger; three cases of housemaid's knee; six cases of accessory bursæ in hallux valgus; one case of hydrocele in a child of six weeks; one case of ranula. He thinks this method the easiest, surest, and most harmless one.

CARCINOMA PRODUCED BY INOCULATION.—Dr. Hanan of Zurich reported *Deutsche Medizinal Zeitung*, the successful inoculation of carcinoma, using rats for his experiments.

He introduced portions of metastatic adeno-carcinoma into the cavity of the tunica vaginalis of the scrotum. In this way he repeatedly succeeded in obtaining extensive carcinosis. Histological examination demonstrated the complete similarity of the original material and the experimental results. Former attempts failed because animals were inoculated with human material, ulcerating carcinomata, or carcinoma fluid was used, or too young animals were chosen for experimentation.—*Weekly Medical Review.*

THE PRINCIPLES AND PRACTICE OF SURGERY. By John Althurst, jr., M.D., Professor of Surgery and Clinical Surgery in the University of Pennsylvania. Fifth Edition. 1148 pages, with over 600 illustrations. Lea Bros. & Co. Philadelphia.

The fifth edition of this already well-known work comes to us with many new illustrations, and an increase of reading matter. It has for years enjoyed the appreciation of both teachers and students in surgery, and this new edition will fix the author's practices all the more firmly with practitioners. The principles governing the practice are clearly set forth and well abreast of the times. We heartily recommend it.

A PAIR OF FORCEPS LEFT IN THE ABDOMINAL CAVITY.—Two prominent surgeons in Pittsburg are charged with having left a pair of forceps in the abdominal cavity of a woman after a laparotomy. The presence of the foreign body was discovered by another surgeon, whom the patient had called in, and the wound was re-opened and the forceps removed by him.—*Weekly Medical Review.*

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DEPARTMENT OF

GYNECOLOGY.

EDITED BY

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Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

THE OPERATION FOR PARAMETRIC ABSCESSES.*

A paper read before the Upper-Rhenish Medical Meeting at Freiburg,

BY DR. BAUMGAERTNER.

Medicinalrath in Baden-Baden.

The surgical principle, that, as soon as the general and local signs cause us to suspect the presence of a pus cavity, it be searched for, and unobstructed escape be provided for the pus, obtains also in dealing with parametric abscesses; the only difference being that here we meet greater difficulties, and warning voices who would trust smaller abscesses to absorption, and only offer surgical interference in cases of greater extent.

Very extensive abscesses are in fact readily found; they mostly meet the searching finger half way, being on the road to the surface, along muscular sheaths, vessels, and pelvic fascia, or they absorb walls of adjoining cavities.

Permit me, on the ground of personal experience, to lay before you the separate situations from which we can approach these subperitoneal abscesses.

We will first consider the points of the *pelvic brim:* If abscesses are palpable in the neighborhood of the pelvic brim, we usually have an already enormous pus cavity. But we should in no case take it for granted that the most prominent point will afford ready exit to the pus, as this is apt to be the apex of the cavity. This, though affording relief to patient, and possibly putting an end to the trouble, may also endanger the life of the much weakened patient. The point of attack—

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*Synopsis of a Translation from the German, by Wm. Krauss, M.D.

perhaps already perforated—is in the first place to be made large enough to enable us to ascertain whether the cavity have a more dependent part, at which a counter-opening might be made for drainage.

It is possible for pus forming in the P* to rise far above the wing of the sacrum and crest of the ilium, nay even upward along the Psoas. I have opened such an abscess at the edge of the quadr. lumborum, where it was about to break through, the skin being considerably reddened. A long probe was passed in, its head presenting under Poupart's ligament, where a counter-opening was made. Were it not for its etiology (a premature labor having occurred nine months previously) it might have been considered a Psoas abscess.

A main attacking point for certain large abscesses is in the *neighborhood of Poupart's ligament*, either above or below it. If the peritoneum be dissected up from its reflection at Poupart's ligament by the advancing pus, it is very easy to incise above the ligament, and reach the pus cavity by simply dividing the transverse fascia, the peritoneum being raised to some depth.

If the "reflection" be not raised there will be no trouble in separating peritoneum from pelvic fascia by a blunt instrument, as far as the posterior fold of broad ligament. In one case a curved sound introduced at Poupart's ligament could be felt under Douglas' fold. I drained it underneath per vaginam. In a similar one, I put in two long drainage tubes from over Poupart's ligament to P., and irrigated, using one as the afferent tube. In both patients the legs had been dropsical, and the previously high fever disappeared at once. Hegar follows a similar route from Poupart's ligament laterally and past the bladder to vagina.

P. abscesses also break through under Poupart's ligament, pass between fascia of femoral muscles, preferably between Pectineus and Ileo-Psoas, pus reaching femur, and thigh swelling enormously. Tumor is then at upper and outer side of thigh. To enter we can best work the finger between the fascia, separating Tensor vaginæ and Vastus externus on one

* The capital P is to stand for parametrium, the lower case p for parametric.

side, and Rectus and Sartorious on the other, when pus will be reached next to bone, and we can pass a drainage tube from here upward, under Poupart's ligament, and into p. abscess. Two such p. abscesses, after opening and draining, healed in a few days, the patients who had long been feeble and feverish recovering in very short time.

Another variety of p. abscesses raise the peritoneum, appearing as elevated tumors, without reaching the "reflection" or raising peritoneum laterally against the ilium. Among the diagrams of Schiesinger shown by Bandl in his "Diseases of Ligaments" is one of a subperitoneal pelvic abscess, which rises from under broad ligament as an elongated tumor the size of a man's head, reaching to upper border of kidney and forward as high as the umbilicus.

At the convention of Natural Scientists in Baden 1879, I reported a case of this kind. It was a bilateral p. abscess. On the left it could be opened per vaginam. On the right it nearly reached the level of umbilicus, appearing as a rounded body resembling an ovarian tumor. It was not movable, tympanitic resonance covered it and the entire right side of abdomen, down to Poupart's ligament and symphisis. On vaginal touch, the right P. was more resistant only when strong pressure was made on it from the abdomen. The diagnosis lay between p. abscess and cystic tumor of broad ligament. The high evening temperatures (40° [104.° F.] and over), the emaciation, the presence of an abscess in the left ligament, all pointed towards p. abscess on the right. The elevated location of tumor decided me to laparotomy. The right ligament presented as a tumor with a globular cupola behind some intestinal coils. No pelvic perimetritis, except slight, easily separated adhesion of the right ovary and tube to tumor in right lateral angle of Douglas' fold.. The bowels showed not a trace of inflammation or adhesion anywhere. The nearest point of tumor was easily secured to lower angle of abdominal wound by means of sutures. A trocar was then inserted, a quantity of thick pus flowed out. The puncture was then enlarged, the margins of opening stitched to integuments. Drain inserted into counter opening in vagina close to cervix. Irrigation after closure of abdominal wound,

and again in a week. Result exceedingly favorable. The fever of two years' standing disappeared at once, the patient who had wasted to a skeleton, returning home well nourished soon afterward.

In such cases, where ligaments rise as high as this, I consider laparotomy entirely justifiable. The summit of pus cavity being held up by sutures, no pus can be hemmed back by folds, thorough irrigation is insured, the procedure at once becomes and remains an extra-peritoneal one throughout.

Let us leave the pelvic brim. At the *pelvic floor* I will first take up the "*incisura ischiadica major*" (great s. s. notch). Here the pus forces along the sheaths of the Pyriformia and obturator internus, and out at the great sacrosciatic foramen. In a practice of twenty-six years, I only had the opportunity twice of opening p. abscesses at this point, but in both cases I only had to go through the gluteus to reach pus. No counter-opening per vaginam is required here; it is only necessary to keep wound open until pus ceases to form within. These abscesses are situated in the fat of the ischio-rectal fossa. Hegar treats these by an incision between the tuberosity and the spine of the ischium. Lately he did the resection of Kraske of ischium and lower end of sacrum. We can then enter the ischio-rectal fossa and advance to under surface of Douglas' fold without opening the peritoneum; I have convinced myself of this on the cadaver.

Other points on pelvic floor are *rectum* and *vagina*.

In my judgment, the rectum is to be considered only as a site of perforation, not of operation. Although we get cures after perforation, it should not be courted, as grave complications may arise from entrance of flatus, etc., into the pelvic cellular tissue.

If perforation through rectum has occurred, I consider it my duty to secure another route through vagina; the rectal perforation, if small, will then readily close. In one such case, the discharges through a glass drain in vagina soon lost their fecal odor, the vaginal fistula finally closing without trouble.

Most p. abscesses surround the *vaginal roof*, sometimes descending around the vagina. If fine perforations have formed

by pus drops, they are to be enlarged with a blunt instrument and kept open by iodoform gauze. If perforations do not exist we enter at the most dependent part of the more or less soft tumescence.

I would caution against the use of the trocar in such cases, even if fluctuation be very plain, as it is hazardous to depend on avoiding vessels, ureter, or even the rectum. With the aid of Sims' specula the site is to be exposed, the parts put on the stretch by ball forceps, advance made gradually, bleeding points secured, and a pair or two of artery forceps left in place if ligature be difficult. The aperture should be large enough to be easily kept open.

Repeated febrile attacks, ushered in by renewed chills, high temperatures, and sweating, are certain indications of the presence of a pus cavity. Though little may appear to be gained at once by the incision, the patient will experience relief; the temperature will fall, just as in other phlegmonous conditions. I need only to remind you of the tense phlegmones sometimes found in the neck, such as result from parotitis. Though we poultice from week to week, the neck remains hard as a board, the situation becomes more and more serious, and amidst repeated chilliness the inflammation spreads as far as the clavicular fossa. Not until a free opening, extending through deep cervical fascia, at the site mostly disposed to soften, and though only a few drops of serum exude, not until the inflammatory tension is relieved, does the crisis in the local and general condition set in. From this on improvement is slow but sure.

The benefit derived from continuous warm douches in p. infiltrations here deserves mention. It is softening, solvent, soothing and favors absorption. We employ it in the hospital from 10–30 minutes at a time, having put in pipe connections with the thermal water of Friedrichsbad. At the Berlin congress I demonstrated the arrangements as constructed by myself.

Another favorable site on the pelvic floor, perhaps not yet taken cognizance of, but one which once proved the only one available to me, is the *vesico-uterine fold.*

It can not be doubted that a P. anterior, an inflammation of pelvic cellular tissue between bladder and uterus, does occur, often probably as part of an extensive parametric affection. Such a case I take the liberty to present.

A Hamburg lady was taken down in that city eight years ago from injuries received at the hands of a mid-wife working manually at the placenta. Puerperal fever resulted. Seven years afterward the attending physician had occasion to examine her under narcosis for continuous pain in abdomen, especially during defecation. He found small tumors at the side of uterus, and ordered thermal baths. For this purpose she came to Baden in fall, 1887. Patient had severe bronchitis, copious expectorations, high fever, night sweats, progressive emaciation. One day the urine began to smell fetid, I was called in consultation, and induced her to enter a private room in our hospital.

Uterus somewhat retroposed, a soft tumor between it and symphysis, gradually losing itself in the P. on the left side. Left P. decidedly more resistant, attached to side of pelvis by fibrous bands. Right P. perfectly soft and normal. Uterus not much enlarged, projects over tumor in front of it. The right ovary is displaced, somewhat enlarged, resting on right lateral portion of Douglas' pouch, and very painful. As urine contained fetid pus I concluded that it percolated through between bladder and uterus, and that the smelling was connected with left p. tumor. On introducing finger through dilated bladder, I could discover no perforation, but found that tumor of left P. surrounded cervix to posterior wall of bladder, and descended perpendicularly at right cervical border. No pus escaped into bladder during examination. An incision, large enough to introduce finger and scissors, was made at point of attachment of cervix to anterior part of vaginal roof, and the bladder dissected from its attachment to uterus. At the depth of 4 cm. (1½ inch), I struck the abscess cavity. On dilating this, a teacupful of horribly smelling pus escaped. About 2 litres (4¼ pts.) of sublimate solution was run through a bent glass tube, passed through the opening into left P., and finally a drain wrapped with iodoform gauze inserted between bladder and uterus. The

course as expected, was exceedingly favorable. No more pus appeared in urine, fever gone, night rest returned. This 7 year old abscess did of course not close very readily, and required irrigation for quite a time. Today patient is again a blooming woman, cough and night sweats are no more. The left P. and the vesico-uterine fold are still a little thickened, the right ovary has lost its sensitiveness. This patient had had continuous fever since her puerperium.

At recent Gynecological congress in this city we learned further attacking points. By Frommel's route for total excision of uterus from perineum, (transverse incision from ischium to ischium between rectum and vagina) we can advance to under surface of Douglas' pouch to reach extra-peritoneal abscesses. Finally, Sanger has reminded us of a former suggestion for removal of uterus, or tumors in pelvis: Commencing at an incision beginning at right labia parallel with raphe of perineum, and past the right margin of anus, we can proceed upward in the postero-lateral angle of vagina. We would then enter the side nearest the abscess, where the incurred danger would be least and prospect of early recovery the best.

All cases operated on by me have satisfied me that they could and should have been operated on weeks, months, even years before. We are not only justified but expected to open p. abscesses as soon as general and local signs point to their existence. There is no danger when done by modern antiseptic methods, even though at times they are difficult of approach, whilst on the other hand, the greatest danger to life exists, prolonged suffering is the result, if we do not conduct the purulent matter to the surface, but instead depend on the robust constitution of our patients.

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DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

EDITED BY

JAMES L. MINOR, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

A FEW SUGGESTIONS ON THE TREATMENT OF DISEASES OF THE EYE AND EAR.*

JAMES L. MINOR, M.D., MEMPHIS, TENN.
Late Attending Surgeon to the New York City Hospitals on Randall's Island.

I am prompted to make these suggestions by a knowledge of the fact that by far the larger number of patients with eye or ear disease, fall under the care of the general practitioner, who in student-days, found these subjects not only dull and uninteresting, but complicated—hence he has simply attempted to get the general principles, without a thought of obtaining a thorough mastery of the subject—a thing difficult of accomplishment, when professor and text-book both dwell so much upon details. I felt this keenly myself when in general practice, and have heard frequent reference to, and seen many illustrations of it, since I devoted special study to these diseases. I shall, in a general way, and briefly, attempt to give simply the treatment of those diseases most frequently seen, by suggesting the use of a few remedies which will be useful to the greatest variety, and hurtful to but few, or none of those diseases liable to be mistaken for one another.

The most frequently observed disease of the eye, is *catarrhal conjunctivitis*, or ordinary "cold" of the eyes, which with simple cleanliness is, in many instances, a self-limited disease. A cure can be hastened however, by local applications; and in the choice of these, preference should be given to the milder forms of eye-washes, for they are in nine cases out of

* Read before the Mississippi State Medical Society in 1887, and published in this journal at the request of medical friends who desire the article, and think it will be generally useful.

ten equally as efficacious as the stronger applications. They are not unpleasant to the eye, and can do no harm. If inflammation of the eye (conjunctiva) assumes an active type, there is apt to be hyperæmia of the iris, which readily passes into inflammation of that structure, under the influence of strong applications to the lids or globe; and the same may be said of the cornea—hence the safety of mild remedies, and the danger of strong ones. Either of the following prescriptions will meet the indications of a mild eye-wash:

1. A solution of common salt (grs. x ad ℥i).
2. A saturated solution of boracic acid (grs. xv ad ℥i).
3. ℞ Sodii biboratis ℈iv, aquæ camphoræ, aquæ, aa ℥ii. M.
4. ℞ Zinci sulphatis gr. i, acidi boracici ℥i, aquæ ℥iv M.

These may be freely applied to the eye, without fear of harm. As examples of what I consider the stronger eye-washes, I may cite solutions of copper, of zinc, of alum, of nitrate of silver, of acetate of lead, as strong as five or ten grains to the ounce.

The next disease of the eye in order of frequency is inflammation of the cornea, or *keratitis*, which is sometimes associated with the catarrhal ophthalmia just considered, and in many instances the casual observer will place the two diseases in the same category. And yet, the strong applications, which the inflamed conjunctiva would stand, not only with impunity, but with marked benefit, might seriously endanger an eye affected with keratitis. Here treatment *must be mild*, if safety of the eye is consulted. Any one of the prescriptions which I have suggested can be used with benefit and without danger, and it is well to use in addition some soothing application, as ℞ Atropiæ sulphatis, cocain. muriat. aa gr. ii, aquæ ℥i. M. Sig. Put two drops in the eye three times a day.

Another disease of the eye—inflammation of the iris, or *iritis*—is often seen, and it too, has so many symptoms in common with the diseases already considered that it is liable to be mistaken for either. Here all the usual eye-washes are objectionable—their danger increasing with their astringency. The prescriptions which I have given, are at least open to this objection—and while they can do no good, they can hard-

ly be considered as dangerous. The sheet-anchor here, is atropia, which can be advantageously combined with cocaine, four grains each, of cocaine and atropine to the ounce of water. This should be used sufficiently often to keep the pupil dilated, and until the eye is free from redness. Attention should of course be given to the general health in every instance. Either the syphilitic taint or the rheumatic habit will usually be found with iritis. Whenever the eye-ball is red and inflamed, with dread of light, or haziness of the cornea or a contracted or sluggish pupil, rely upon atropine and cocaine, and use no stronger application than a solution of boracic acid. When an absence of these symptoms shows that the trouble is in the lids, stronger applications are admissible.

A few points about diseases of the ear, and I shall cease.

Ordinary *ear-ache*, is an inflammation of the middle ear, and when the process goes on to pus-formation, an abscess on the inner side of the drum membrane is the result. The pressure from the pent-up pus causes a rupture of the drum, through which the matter escapes. This is often an end of the trouble, but frequently the inflammation continues—the opening in the drum remains — disease of the bones of the ear develops, and a more or less continuous discharge, an otorrhœa, is the result. If hot water be liberally and frequently injected into the ear through a douche, the inflammation will usually be stopped and a cure effected. Two or three drops of hot laudanum dropped into the ear will often accomplish the same purpose. After the discharge appears it can ordinarily be checked by syringing the ear often enough to keep it clean, with warm water containing boracic acid in the proportion of fifteen grains to the ounce; and, if, in addition to the syringing, a little pulverized boracic acid is blown into the ear through a quill or tube, after the ear is cleansed, this treatment will usually suffice to cure an otorrhœa.

In removing plugs of wax, or foreign bodies which have gained access to the ear, it is better to rely upon warm water and a syringe, than to resort to instruments. It is not only easier but more efficacious and safer. With the most delicate

touch, it is as difficult to handle an instrument with precision in the deep and small cavity of the ear, as it is to avoid inflicting injury to these delicate parts which may be more serious than the trouble for which it was undertaken.

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Memphis, Tenn.

TO OUR READERS.—In this issue, the MEMPHIS JOURNAL OF THE MEDICAL SCIENCES can look back at its past record, as it emerges into its new year. Born of a desire to establish a medical journal which would be comprehensive, practical and concise, a corps of editors was selected from the active practitioners of the city, each one of whom was specially fitted for the department to which he was assigned. Thus there was division of labor and opportunity for greater care in selecting material for the JOURNAL; and friendly rivalry would certainly stimulate each editor to make his department the best, and thus insure diversity and interest of subject. The identity of each department in the JOURNAL would not only give its editor absolute control of its pages, but would enable the reader to turn at once to that subject which interests him most.

Upon these principles the JOURNAL was founded; under these rules it has been conducted; and in assuring its readers that this course will be followed in the future, the JOURNAL

takes leave of the old year, with a sense of responsibility well sustained, and welcomes the new, with heart, head and hand ready for the work which is in store for it.

THE GERM THEORY.—Patient, scientific investigation has done much toward elucidation of the germ theory of late, and as fact after fact is established concerning the behavior of disease germs, the subject retreats from the domain of theory and rests upon the foundation of absolute certainty. That we are surrounded by micro-organisms of disease of some kind, at all times, and so rarely succumb to their influence, is explained by the fact that the human body contains in either its own fluids or cells, substances which may destroy or throw off the invading germs. And again, as disease germs are not themselves injurious, but produce their evil effects through chemical poisons generated in their growth, they must have favorable soil for their development, else these poisons cannot be formed, and the germ is harmless. The fact that concentrated solutions of these poisons will render the germs themselves inert, has led to attempts at their isolation with a view of obtaining substances which by inoculation would confer protection against infectious diseases, without producing ill effects themselves. This has been done for anthrax, one of the most virulent, and at the same time, best established of germ diseases, by Mr. Hankins,* who isolated an albumose from anthrax cultures, which conferred protection against anthrax. This is one of the most important and far-reaching discoveries of the age, and it opens a field which it would be utopian to consider.

ATTENTION is called to the *Pointed Paragraphs*, which will hereafter be a feature of this JOURNAL. Brief and pointed medical items will be so arranged as to form continuous reading matter at the top of our advertising pages. This plan has been instituted for the benefit of ourselves, our readers and our advertisers. It enables us to give two aditional pages of reading matter, and brings the reader and the advertiser

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* British Medical Journal.

together. As we accept only such advertisements as we can commend, our advertising pages become part and parcel of the general and reliable information contained in our JOURNAL.

DR. J. E. BLACK retires from the Presidency of the Board of Health, of Memphis, after one year's administration of its affairs, during which time the sanitary condition of the city has been greatly improved and the death rate much lessened. He has made an enviable reputation for himself as a sanitarian, and carries with him from office the thanks of the community and their best wishes for his success.

VITAL STATISTICS OF NEW YORK FOR 1889.—The total number of deaths in New York in 1889 was 39,583. This is equivalent to a death-rate of 25.12 in a thousand, the population being estimated at 1,571,558. This is an improvement over the rate for 1888, when there were 26.24 in a thousand. The deaths exceeded the births by 2062. There were 14,400 marriages reported. Phthisis, as usual, was chief among the causes of death. It caused 5163 deaths, or 100 fewer than in 1888. There was only one death by small-pox. The total increase in the city's population was estimated at 50,000.—*N. Y. Med. Jour., Jan. 11, 1890.*

THE next meeting of the American Medical Association will be held in Nashville, May 20–23. There is every indication of a large attendance and an interesting meeting. The profession in this State should leave nothing undone to make it a success. Their reputation is at stake. They must in their contributions sustain their professional knowledge; in their management of the proceedings, their executive capacity; and in entertaining their visitors, their reputation for hospitality.

A notable feature has of recent years grown up with the A. M. A., towit, an exposition of medicines, instruments, etc., etc., used by surgeons, physicians and specialists in their daily work. We learn that already applications have been received for the exhibits at Nashville which will render it a grand display, of itself well worth a journey of hundreds of miles.

Dr. W. B. Rogers has been appointed President of the Board of Health, of Memphis. He brings to the office a record of energy and success which is a guarantee that the work in his department will be thoroughly performed.

National Association of Railway Surgeons.—This association will hold its third annual meeting in Kansas City, Mo., on the first Thursday in May. Preparations are being made on a large scale, and a liberal attendance is anticipated. Many practical points were brought out at the last meeting, and to those interested in railroad surgery, pleasure and profit are promised for the coming one.

The preparations of Hypophosphites, Coca, Pepsin, etc., made by Messrs. R. A. Robinson & Co., are endorsed by many prominent physicians. We recommend a careful perusal of the advertisement of this well known manufacturing house. See advertisement.

Chloral for Dandruff and Baldness.—A solution of chloral hydrate, 5 grains to the ounce of water, will clear the hair of dandruff and prevent it falling out from that cause. In many instances where the patient is nearly bald, the application of the above-mentioned solution will restore the hair. Arnica oil is also an admirable remedy to promote the growth of the hair. A small quantity well-rubbed into the scalp three or four times a week, can be tried with expectations of benefit.—*Clinical Record.*

The Memphis Journal of Medical Sciences will be glad to receive and publish short articles on medical topics, clinical reports of interesting cases, and any matter of importance to the profession.

An Unfair Law.—By a peculiar and very unjust law in the State of Virginia, any physician living within one hundred miles of a trial, may be summoned to attend and compelled to testify as an expert, for the same compensation that

is given an ordinary witness, i. e., fifty cents per day and mileage. The profession should by united effort, have the law repealed.

The Tennessee State Medical Society will meet in Memphis this year, April 8–10. The Secretary is active in his efforts to secure a large attendance and an interesting list of articles, and both are promised.

Illegitimate Births in Foreign Countries.—The ratio of illegitimate births in the various countries of Europe is, according to the last reports, as follows: Out of every hundred births, 7 were illegitimate among the Spanish, 11 amongst the Italians, 16 amongst the English, and 24 amongst the Germans. In Paris, however, the illegitimate births reached 38 amongst the people of French nativity.—*Boston Med. and Surg. Jour.*

Albuminate of Quinine.—This salt is formed in yellowish-white flakes. It is insoluble in water alone, but soluble in water containing hydrochloric acid; also in a solution of pepsin. It is tolerated by the most sensitive stomachs.—*Druggists' Circular and Chemical Gazette.*

Our readers will find on another page of this number a change in the advertisement of Tarrant & Co., as this month they call attention to their Effervescent Seltzer Aperient. This old remedy, one of the most efficient salines known to the profession, can be profitably employed at this season of the year for its alterative effect; it is not only a palatable and safe aperient, but is used with confidence in lithemic, gouty and other conditions where alkaline remedies are indicated.

The Mississippi State Medical Association meets in Jackson on the third Monday in April. This is one of the most progressive associations in the South, and good work can be looked for.

MEMPHIS HOSPITAL MEDICAL COLLEGE.—The closing exercises of this institution will be held at the Y. M. H. A. Hall in this city, March 28, 1890. The graduating class will number over sixty. Charge to the graduates, by Prof. Crofford; salutatory on behalf of class, by F. M. Dooley of Mississippi; valedictory on behalf of class, by B. D. Woodson of Arkansas.

THE Tenth International Medical Congress will be held at Berlin, August 4–9, 1890.

CITRIC ACID IN MILK.—"Professor Soxhlet, a French chemist, has demonstrated that cow's milk naturally contains citric acid in an almost constant proportion of one gramme to every litre. A good animal yields, therefore, at a single milking, as much of this acid as is contained in two or three lemons, and the annual aggregate throughout an extensive dairying neighborhood must be something enormous. It occurs in the form of a calcareous salt."—*Druggists' Circular & Chemical Gazette.*

MEMPHIS MEDICAL COLLEGE, January 20, 1890.

WHEREAS, It was the will of the Almighty God to remove from our midst our esteemed and beloved brother, J. M. Gresham,

Be it resolved, 1: That we submissively bow to the will of the Almighty.

Resolved, 2: That we do individually and collectively, sincerely sympathize with his bereaved relations and friends, and pray that the Allwise Creator may temper the blow and lighten the burden that has fallen on them, and while we do submissively bow to the decree of the Divine will, we feel and know that the class has lost a bright star and the school an honored factor.

Resolved, 3: That these resolutions be published in the *Memphis Medical Monthly* and MEMPHIS JOURNAL OF MEDICAL SCIENCES; also, a copy be sent to his county paper for publication, and a copy of the above journals and paper be sent to his parents.

FELLOW STUDENTS.

THE MEMPHIS JOURNAL OF THE MEDICAL SCIENCES thanks its friends for expressions of good opinion, and hopes they will lend their aid in swelling its subscription list.

THE

Memphis Journal of the Medical Sciences.

MEMPHIS, TENN., APRIL, 1890.

DEPARTMENT OF

PRACTICE OF MEDICINE & THERAPEUTICS.

EDITED BY

B. G. HENNING, M. D.

S. A. ROGERS, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

EXPERIMENTAL DIABETES MELLITUS.*

Dr. Minkowski of Strassburg University, in a paper read before the Division of Practice at the 62nd German Congress, related some interesting experiments on extirpation of the pancreas in dogs, and consequent diabetes mellitus. The results show that there is certainly more than an accidental connection between operation and result.

The entire pancreas had to be removed to cause diabetes mellitus, it being immaterial whether the remaining portion was in connection with the duct or not. Ligature of pancreatic duct moreover did not produce the disease, all experiments showing that the diabetes did not depend on absence of pancreatic juice in gut, but on the loss of an as yet unknown specific function of the pancreas in the intermediate metabolism, a function that is absolutely necessary for the destruction of sugar in the organism.

He finds that this is the only experimental form of diabetes which is analogous in every respect to the corresponding disease in man, and cites many authorities among eminent pathological anatomists who find among the meagre *post-mortem* appearances of diabetes, that the pancreas is more

* Translated by Wm. Krauss, M.D., from Berl. Klin. W., March 3, 1890.

often found diseased than any other organ, nearly all observers finding it diseased in nearly 50 per cent. of cases.

Minkowski therefore thinks that, no matter what objections may be urged against his hypothesis, other views of the etiology of diabetes have much less ground for existence than his own, and insist that there are at least some cases where a diseased pancreas is the cause. As to the view of nervous origin, he says that even though it be proved it can only be an indirect cause, as nerve tissue *per se* cannot destroy the molecule of sugar, and that the hepatogenous theory is disproved by clinical and pathological observations; and as to muscle, though we know that muscular exercise will diminish glycosuria, the most advanced progressive muscular atrophy will not produce diabetes.

After again especially calling attention to the fact that the secretive function of pancreas has no connection with diabetes, he closes with the observation that the supposed metabolic function of pancreas need only be a link in the chain of general glycosic metabolism, though he has no positive proof as yet for his hypothesis.

In postscript he observes that as to therapy it would be premature to offer anything new, especially as our therapy in pancreatic affection is limited to its secretive function. The regulation of diet would not diminish in importance, it would rather tend to give rest to pancreas, and by that means hasten resolution.

CREASOTE IN DIABETES.—Two cases of diabetes have been treated with excellent results by Valentini by means of creasote administered internally. In one case four drops per diem were given at first, this quantity being afterwards increased to ten drops. Under this treatment the sugar disappeared, and did not return when the patient began to eat starchy food. The other patient was given six drops per diem, and did equally well.—*Lancet.*

TWO DROPS OF beech-wood tar creasote given with a little water, is a specific for hiccough arising from drunkenness.—*Med. Brief.*

NOTES FROM GERMAN EXCHANGES ON NEW REMEDIES.*

OREXIN HYDROCHLORATE, A GENUINE STOMACHIC.—Prof. Penzoldt of Erlangen recommends this chinazolin compound, which he names orexin from its properties as an appetizer. Its chemical name is phenylhydrochinazolin; it consists of colorless (or slightly colored) shining needles or spears; contains 2 mol. of water of crystallization. The base is almost insoluble in water; the hydrochlorate is readily soluble in hot water.

Experiments on healthy individuals showed that doses of 15 grs. may be taken, before a sense of heat, nausea and vertigo make their appearance. In doses of 8 grs. it caused extraordinary hunger.

Experiments on animals show only very slight toxic action.

Further tests showed that it not only causes hunger but decreased time of digestion by ½ to 1 hour, according to dose, and that the appearance of free H Cl in stomach was much earlier.

After detailing effects on 36 patients he summarizes as follows: Hydrochlorate of orexin is capable, in many cases, of bringing back failing appetite, and thereby restoring lost nutrition.

In only 5 of the 36 there was no effect noticeable; in 5 the effect was somewhat obscure, in all others it was distinct, sometimes surprising. It usually required more than one dose; occasionally the action of the drug appeared suddenly one or more days after a single dose had been given. This delayed action was noticed repeatedly in the same patients.

The only untoward symptoms were a sense of burning in œsophagus in some, vomiting occurred in 5, but was very transient; in some of these it was several days after taking the orexin.

The dose is 5–7 grs. twice a day, to be given in a large amount of fluid on account of its irritating effect. No theory for its action has been advanced.—*Therapeutische Monatshefte.*

* Translated from the German by Wm. Krauss, M.D.

EXALGIN.—Gaudinau finds that single doses of 4–8 grs., or daily doses of 6–12 grs. of exalgin, will cause cessation of all cases of neuralgic pains in ½ to 1 hour. Rheumatic pains also disappear under its use. Unfavorable symptoms are tinnitus and a sense of intoxication. Has used it in 75 cases, including neuralgia, articular pains, epilepsy, tuberculosis, diabetes, Potts' disease, gout, etc., and nearly always obtained relief.

Exalgin is odorless, sparingly soluble in water, and may be given in powder.—*Therapeutische Monatshefte, Feb., 1890.*

Among the representatives of the class who claim that the principle of exhibiting remedies for the reduction of temperature in fevers is wrong, Unverricht stands at the head; hence, it is remarkable that he should report on the action of a new antipyretic, *orthine*. Therapeutical experiments show it to be unreliable and toxic. Kaufmann (*Berl. Klin. Wochenschr., 1890, No. 3*) warns against its use.

THE ANTISEPSIS OF THE RENAL PASSAGES BY THE INTERNAL USE OF SALOL.—In the intestinal tube, says the *Therapeutic Gazette*, February 15, 1890, as a consequence of the action of the pancreatic juice, salol splits up into carbolic and salicylic acids, which are then eliminated by the kidneys, carbolic acid without being changed, salicylic acid after combining with sodium. Investigations by Neucki, Sahli, and Lepine have proved the truth of this statement beyond contradiction, and these writers have as a consequence, recommended its internal use in "internal disinfection" in cholera, typhoid fever, and bacterial diseases. Dr. Dreyfuss (*Wiener Medizinische Blatter*, December 19, 1889), bearing these facts in mind, has recommended its use internally as a means of inducing the passage of an antiseptic fluid through the kidneys, ureters, bladder, and urethra; and claims that it acts in a much more intensive manner and covers a wider field than can be accomplished through an injection of antiseptic fluid. Sahli has further shown that the urine of patients who have taken salol internally is aseptic, and that salol in large doses is well borne and never produces toxic symptoms. It is, therefore,

quite as suitable for producing antisepsis in the urinary passages as naphthol is for the antisepsis of the intestinal tract. Dreyfuss has employed salol, either alone or in composition with various balsamics, in blennorrhea, the full dose varying from 75 to 120 grains. Even in acute cases, treated at the very outset, this mode of treatment rapidly diminished the secretion, and in some few cases arrested it within a few days. Its effects are especially marked in combination with the use of cubebs or copaiba.

Finally, Dreyfuss recommends this use of salol in operations upon the urinary organs, for in this way the urine is kept aseptic, and one source of danger is thus avoided.

THE PROGRESS OF CREMATION IN ENGLAND.—*The Medical Press and Circular* (January 27, 1890) states that there are everywhere in England signs that public sentiment against cremation is diminishing in that country. Among other things in this regard it may be noted that the Manchester Cremation Society has just accepted the offer of one of its members, a civil engineer, to visit at his own expense and report upon to the council the whole of the more important crematora in the continent. Such report should be not only interesting, but highly useful. It would seem that the furnaces in use are not of the most satisfactory description, and that there is still room for improvement in this regard. This is a subject to which engineers may well give their studied attention.—*Medical and Surgical Reporter.*

THE NINTH CONGRESS FOR PRACTICE OF MEDICINE will take place in Vienna from 15th to 18th of April. The following subjects will be discussed: Treatment of Empyema, by Immermann and Schede; discussion on Influenza, by Bäumler; treatment of Chronic Nephritis, by v. Ziemssen and Senator. Papers will be read by: Unna, Physiology of Skin; Mosler, Pemphigus; Gans, Gastric Function in Diabetes Mellitus; Fürbinger, Ostitis of Typhoid Origin; Stadelmann, Action of Alkalies on Human Metabolism; v. Liebig, Mountain Disease; v. Frey, Relation Between Pulse Form and Closure of Valves; Schott, Acute Overexertion of Heart and Treatment; Mosler,

Therapeutical Communications; E. Pfeiffer, Uric Acid Gravel; v. Ziemssen, Pathology and Diagnosis of "Ball-Thrombi" of Heart; Stricker, Vienna, Demonstrations with Electric Microscope; Leubnscher, Influence of Medicines on Intestinal Absorption; Sternberg, Tendon Reflexes; Curschmann, Pathology of Floating Kidney; Romberg, Heart Innervation, and His, Demonstrations; Krehl, Changes in Muscularis of Heart in Valvular Lesions; Cornet, Tuberculosis; Hürthle, The Closure of the Semilunar Valves.—*Centralbl. f. Ch. No. 10.*

ARISTOL, A SUBSTITUTE FOR IODOFORM.—Dr. Eichhoff, of Elberfeld, writes quite enthusiastically of aristol, a compound of iodine and thymol, recently manufactured by Bayer & Co., (*Monatshefte f. praktische Dermatologie*). Eichhoff believes that the new drug will supplant iodoform, not only in dermatological practice, but in other conditions where iodoform has heretofore been used, having the therapeutic properties of the latter drug without its disagreeable odor or toxic effects. The author has employed aristol only in diseases of the skin, including varicose ulcers, eczema, lupus, psoriasis, etc., and after reporting his cases in detail, concludes:

1. That aristol is in all cases a harmless drug.
2. That it is a powerful parasiticide.
3. That in the ulcerations of tertiary syphilis curative results are obtained more rapidly than with any other drug.
4. It is the most useful of all applications in the treatment of lupus.
5. In the treatment of psoriasis it does not act quite as rapidly as chrysarobin or pyrogallic acid.

The aristol was in most cases applied as a ten per cent. ointment in vaseline.—*Medical News.*

FROM an experience extending over a number of years in the treatment of sexual disorders, I have been recently led to believe that many of the forms of impotence, including spermatorrhœa, if not induced solely by a long and flaccid scrotum, are largely dependent upon this cause.—*Broome, in Weekly Medical Review.*

DEPARTMENT OF

GENERAL SURGERY.

EDITED BY

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To whom all matter pertaining to this Department should be addressed.

EPULIS—WITH REPORT OF FIVE CASES.*

W. B. ROGERS, M.D.

Professor Principles and Practice of Surgery and Clinical Surgery, in Memphis Hospital Medical College.

The term epulis signifies a growth or excrescence upon the gum. Any growth, then, coming from or resting upon the gum, would come literally within the scope of this term. Fortunately, however, there are but few affections of the gum liable to be confounded with that particular class of tumors to which the concensus of surgical authority has restricted the term epulis—a solid tumor springing, not from the gum, but from below the gum, from the alveolar, and usually from the periosteal lining of the socket of a tooth.

In a detailed description of the diseases of the superior maxilla, Gross omits mention of epulis, though he describes it at length in affections of the lower jaw. I am firmly impressed with the idea of having seen in some surgical work a statement that the lower jaw is exempt from the disease. Again, it is estimated that two cases occur in the sup. to one in inf. maxilla. It has however been my fortune to meet with, in both sup. and inf. maxillæ, well-marked epulis.

Epulis is a solid tumor, varying in size from a pea to a hen egg, firm and fibrous to the touch—usually appears between two of the teeth, which are gradually raised and separated from each other by the red, smooth, glistening growth. The tumor is more or less constricted at its junction with the

*Read before Tennessee State Medical Society, April 8, 1890.

gum in some instances, and again has a broad base; it expands, grows laterally as well as grows from the gum. It is painless to manipulation, but soon interferes with mastication, and while the surface is unirritated the mucous membrane has the appearance of health, though if frequently impinged on by the teeth of the opposing maxilla it becomes abraded and even ulcerates and bleeds. The tumor expanding at its base separates the wall of the tooth socket; destroys the alveolar by absorption, and even burrows down into and expands the bone on which the alveolar is situated, to a shell. The teeth are displaced and loosened. But it is astonishing the minimum degree of pain experienced during the destruction in some cases of a considerable amount of osseous tissue.

Early adult age seems most prolific in the type of tumors to which epulis belongs, but of the few cases that have come under my observation the ages ranged from 20 to 52 years—the oldest subject being the only one which has thus far succumbed to the disease, and he, though seen shortly after the appearance of the tumor, declined any operative interference.

Diagnosis. There should be little if any difficulty in determining between an epulis and other affections of the gum. It is as distinct from hypertrophy of the gum as is any other tumor from hypertrophy, elsewhere located. The noncystic nature can readily be determined by the exploring hypodermic syringe needle. A polyp sometimes occurs on the mucous membrane, but it will have no deeper attachment, while the epulis is a fibrous type of tumor connected with the periosteal covering of the bone. Vascular and warty growths need not be considered in a differential diagnosis. Seen in its infancy, epulis is distinct, and even when far advanced and ulcerating does not resemble epithelial cancer.

Cause. As far as my researches go in the literature on this subject, there seems a uniformity of belief that this growth is due to the irritation caused by diseased teeth. Salter even alleges that in cases where the tumor appears on an edentulous gum, it will be found that though the teeth have been extracted, there has been left behind a carious root.

It may not be uninteresting to note the difference of opinion as to the clinical import and consequently the difference in operative treatment advised. Salter, in his article in Holmes' System of Surgery, and with whom Holmes' recent edition of Principles and Practice of Surgery agrees *in toto*, broadly asserts that epulis is non-malignant from beginning to end. Claims that in young, newly-formed epulis it is only necessary to remove the offending tooth—the one next, or may be one on either side of the growth, and then with the knife excise the epulis, and a cure results. He emphasizes the point that the epulis is dependent on the existence of the alveolar, and the removal of the teeth is followed by atrophy of the alveolar which is as effective as when removed by the surgeon. In the cases of longer standing, where the growth has spread along the alveolar evenly down to the bone proper, then excision of a segment of the alveolar and may be, bone, on which alveolar rests, effects a cure. This teaching does not agree with one of my cases, of a small epulis, in which I removed the two teeth, together with a segment of alveolar well down to the body of the bone, only to see the growth return at same site within a year.

Opposed to Salter and Holmes we find Gross, Erichsen, Billroth, Cornil & Ranvier, Hamilton, and the mass of writers teaching that epulis is a recurring tumor, tending to destroy life. They strenuously urge the necessity for thoroughly dealing with the site of origin of the growth—excision of the alveolar together with the epulis, going well into uninvaded tissues, even at the sacrifice of the body of the bone whenever indicated.

Strange to say, those writers who dwell on the non-malignant tendency of epulis, all consent to the same histological characters as are claimed for it by those of opposing creed. And it seems to be definitely settled that epulis belongs to the sarcomatous group. Sarcomata as a whole have a strong tendency to recurrence on removal. Every tumor containing embryonic elements is looked upon with suspicion.

The alveolar sarcoma stands second only to carcinoma in its tendency to destroy life, while the giant-celled, or

myeloid sarcoma, is the least malignant of the group; to this latter class belongs epulis, which is composed of fibrous tissue and myeloid cells, the former predominating, and it would appear occasionally existing almost to the exclusion of the latter, and again *vice versa*. The greater the preponderance of myeloid cells the greater the tendency to malignancy. Histologically considered, epulis is a recurring malignant tumor—a sarcoma. Clinically, early removal means a cure. When neglected the tendency is to destroy life.

I beg leave to report four cases and mention a fifth one.

Case I. Clara P., female, black, 32 years of age, presented at my clinic March, 1882, with a tumor about the size of a large chestnut, springing from the alveolar of the left sup. maxilla between the lateral incisor and canine, both of which teeth were loosened from their sockets and displaced laterally. The mucus membrane was smooth, tense and healthy-looking, and had never shown any tendency to bleed. The tumor was rather pediculated; of firm consistence, painless to manipulation, and as far as could be judged, found its origin below the mucous membrane.

The lateral incisor, although showing no signs of decay, had been the site of considerable pain twelve months previous to appearance of the tumor, which dated about six months prior to the examination. The growth of the mass had not been rapid, but was quite in the way of closing the teeth. The diagnosis of epulis was made and with bone pliers a section of the entire depth of the alveolar was removed, going wide of the seat of the pedicle or base of the tumor on each side. It was believed that healthy, uninvaded bone was cut through with the pliers. Hemorrhage was considerable, and the actual cautery used to check it.

The parts soon healed, but scarcely had twelve months passed when the growth reappeared at its former site. Though repeatedly urged to return, the patient delayed until July, 1887, when she presented herself, as seen below. The growth had by this time every appearance of malignancy. Repeated hemorrhages, great pain, a foul-smelling, ulcerated more or less, cauliflower-like mass filled the left half of buccal cavity.

No glandular involvement. It was explained to her the improbability of successful and complete removal of the mass, but she insisted so on even temporary relief that I yielded,

and assisted by Drs. Krauss, DePass and Henning, I removed the sup. maxilla, found the antrum filled up with the growth, which was very encephaloid in appearance. Sir Wm. Ferguson's operation was performed. The incision closed with silk gut suture; the union was good, and when last heard from, one year after operation, parts had healed kindly, patient in good health, and had taken unto herself another husband.

CULLINGS FROM GERMAN EXCHANGES.

WM. KRAUSS, M.D., MEMPHIS, TENN.

From a paper read before the Surgical Section of 62d German General Congress of Scientists, by Prof. Czerny of Heidelberg, on Resections of Stomach and Intestine.*

In his report of operations at his clinic, Prof. Czerny gives the following figures:

1. Resection of Stomach.

Eight pylorectomies were performed on seven individuals for cancer, in one of which he re-operated in eleven months from date of first operation. Expresses regret at not having simply done gastro-enterostomy at the second operation, as he might thus have saved the patient, gangrene of colon being the cause of death.

Two other deaths were also caused by gangrene of colon. On two cases elliptical excision of pylorus was done, one for stenosis from pyloric ulcer (7 years old), the other for omental sarcoma, both of which recovered.

Of three pylorectomies for benign stenosis one terminated fatally from digestion of sutures, the other two recovering.

Thus in 13 resections of stomach, done on 12 patients, 4 died, 8 recovering.

Only the benign stenoses were permanently cured; the malignant ones, though resulting in extraordinary subjective benefit, dying in from 5 months to 2 years. The recurrent growths were always precisely like the original ones. (Presents 2 cases in which resection was successfully performed 7½ years ago.)

Up to 1885 he was compelled to re-close incision 12 times, as the carcinoma was found to be either extensively adherent or metastatic growths had begun. Fourteen exploratory incisions were made in all, 13 for cancer, with only one death, in which case the attempt to separate the cancer had been carried too far; hence, it could not properly be considered an exploration, but rather an uncompleted operation. He therefore considers exploratory laparotomy as without danger.

He commends Wölfler's gastro-enterostomy as an excellent

* Therapeutische Monatshefte, Feb., 1890.

palliative measure, the patients believing themselves to be perfectly cured for the time. Considers it applicable in cases where resection is inadmissible. One of his cases soon doubled in weight, and lived 11½ months. This was his most favorable case, as against his colleague Lücke, who saved 9 successive cases, and he thinks that Lücke's success was due to the fact that he adhered to the typical Wölfler's methods, while he (Czerny) tried several.

The Wölfler method was done 5 times, the v. Hacker method 6 times. Considers the latter as anatomically more correct, as the intestines remain in their natural position, but only applicable when the stomach is considerably dilated and sufficiently movable to be easily rolled out of the abdominal incision. Though his second case, done according to v. Hacker, gave excellent results, and though he always strove to employ this method, he was compelled, in 9 succeeding cases, to do the operation of Wölfler 4 times, as the stomach was too fixed for the former method.

"The duodenum is easily found after turning up stomach and transverse colon, and finding the vertebral column by following meso-colon to its root. To the left the jejunum will be seen to emerge from under meso-colon, and can be readily brought forward. At a nonvascular point the meso-colon is torn through, the nearest portion of the duodeno-jejunum attached longitudinally to stomach by a few peritoneal stitches, the stomach then opened, and the mucosæ of the two viscera then united by sutures: first posteriorly, then anteriorly, and finally the serosa closed over it anteriorly."

Usually made opening 3 cm. (1 inch) long, requiring 30 stitches and ¾ hour time, but found in a *post-mortem*, 5½ months after operation, that os had contracted to 9 m.m. (⅓ inch), and thinks it should be made 4–5 cm. (about 1½–1¾ inches) long.

Has not yet been able to decide whether Senn's method of using decalcified bone rings offers any advantages.

Summary of his gastro-enterostomies was not as good as that of pylorectomies, only 4 patients deriving real benefit. One case died 2 weeks after discharge from clinic from an error of diet. Two lived 5½ and 11½ months respectively, dying of the progressing cancer. The fourth went home to

America, 2½ months after operation, feeling excellently. Three died of sepsis. Four succumbed to the progressive marasmus in 2–4 weeks. In these the operation was undoubtly deferred too long.

[The translator wishes to state here that in Germany œsophageal and gastric cancers are relatively much more frequent than in this country. Prof. Heller (Pathology, Kiel), puts them at the head of the list in order of frequency of all cancers.]

2. Enterectomies.

For malignant intestinal tumors Prof. Czerny has resected 6 times, with 4 deaths and 2 recoveries. In 3 cases the original tumor of colon was so intimately adherent to the small intestine that a portion of this, too, had to be resected.

In three of the cases the primary tumor was situated in cœcum, in the other three it was on transverse colon. Of the two recovered cases one died in 5½ months, the other he exhibited before the Congress. This woman had had an ovarial sarcoma, which he removed in 1881. In 1886 a sarcoma the size of a fist had formed on the transverse colon, which was removed in July of that year. Patient has thus far had no recurrence.

For tubercular swellings, 5 enterectomies were done. In 3 of them the ileo-cœcal portion had to be resected for tumor and stenosis. The third died, the ureter having been imbedded in the perityphlitic cicatrix and wounded in the operation, so that he was compelled to remove the kidney also. Patient did not die of the nephrectomy, however, but of necrosis of line of suture.

The 2 other cases were tubercular ulcers of small intestine, resulting in fistula. One patient with 2 fistulæ recovered, the other, which required closure of 6 openings, died of a perforation remote from the ones sutured.

For intussusception Prof. Czerny resected 4 times. Three required ileo-colic resection, and from a 14-year old boy (whom he presents) he was compelled to remove 80 cm. (21½ inches) of small intestine, as the invagination had extended to anus, portions being gangrenous and inverted so that the serosa looked toward the lumen.

In the fourth case there was an intussusception of colon, caused by a papillary cancer in the sigmoid flexure. It was operated by resecting the invagination protruding from anus. Result excellent.

For fecal fistulæ remaining from herniæ he operated 6 cases. As a rule the fistula was circumcised elliptically, the section elongated on both sides, and the gut then separated from the surrounding adhesions. This sufficed in 2 cases. In the remaining ones circular resection had to be made: first, to prevent stenosis. In only 1 case of *femoral* hernia the abdomen had to be opened above Poupart's ligament; the fistulous gut separated from adhesions and closed by stitches, as the tissues surrounding the fistula were full of sinuses, the integument eczematous.

Five of the fistulæ were in small intestine, 1 in transverse colon, which latter was resected very successfully. The distal end was completely strictured, and could only with great difficulty be brought in coaptation with the proximal end.

The herniæ causing the fistulæ were 3 femoral, 2 umbilical and 1 inguinal. Of the 6, 1 (female) died of collapse, having been extraordinarily reduced by phthisis and loss of juices through fistula (jejunal). The remaining 5 healed by first intention.

Thus Prof Czerny shows that out of 21 enterectomies he lost 8 patients. As in 4 of these double resections were made (2 died), and in 1, 6 tubercular fistulæ were closed; the showing of proportion of recoveries becomes much better, since such cases should, in his opinion, be counted separately.

In conclusion, he says that though results are better than the average of collected statistics, he thinks that skilled operators could make as much progress as did Spencer Wells with his ovariotomies. With improved results indications will multiply, as they are no doubt more numerous than those for ovariotomy. Whilst in small figures accident plays quite a role in results, he considers it nevertheless significant that up to 1885 he had 4 deaths in 7 cases, as against that number in 14 cases since then. Death resulted from collapse as a rule, more rarely from septic peritonitis, which is not quite avoid-

able in such cases. In only 1 the suture proved insufficient, patient dying from necrosis of suture margins.

The enterectomies numbered 8 ileo-cœcal (4 D), 2 transverse colon, 1 sigmoid, 5 small intestine (1 D), 4 double resections (2 D), and 1 sixfold suture of small intestine (D).

Gut sutures always healed by first intention; in only one case of tubercular fistulæ a secondary fistula occurring.

Double-rowed silk-knot suture was used in all cases, and the sutured bowel dropped into abdominal cavity. Drainage was almost always avoided. The double-row sutures leave not a trace of a scar or constriction, so that today an improvement of technique is more to be sought than the employment of new methods.

THE NINETEENTH CONGRESS OF GERMAN SOCIETY OF SURGEONS takes place April 9 to 12 inclusively. The following papers are announced for opening day: Kappler, Ether and Chloroform Narcosis; Bruns, Treatment of Tubercular Joints with Iodoform Injections.—*Centralbl. f. Ch. No. 9.*

DEPARTMENT OF

GYNECOLOGY.

EDITED BY

T. J. CROFFORD, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

THE PORRO OPERATION.

JOSEPH PRICE, PHILADELPHIA.

The true Porro operation is, as we know, the Cæsarean section, to which is added the removal of the uterus. At first sight it might be considered that to perform the Porro operation is to add one capital procedure to another, thus enhancing the dangers and the difficulties, and accordingly increasing the mortality. This is not true; for by removing the uterus we take away from the Cæsarean section the most important factor in its dangers; that is, the succulent uterus with its incision. Another way of stating the argument is,

that the operation is simply a supra-vaginal hysterectomy, with the complication of pregnancy, instead of that of a fibroid tumor. In a paper on supra-vaginal hysterectomy, I have endeavored to show that an uncomplicated operation of this sort, with the extra-peritoneal treatment of the stump, is an operation, under the improved technique, of comparatively little danger. The latter operations in Philadelphia alone, have gone far to make this position tenable. The operations in the hands of other skillful men also confirm the statement. The results of men without the abdominal instinct have no right to be considered.

Now the complications of hysterectomy, when they involve no important viscus, but are limited to simple adhesions, are not to be feared, with intelligent drainage. I wish to call your special attention to these points in detail, because I intend to use them comparatively. In the Cæsarean section, the danger of hemorrhage as an ever present menace is not to be denied. Of course, it can be controlled; but it is present, nevertheless. In the Porro operation, the uterus is strangulated at once, thus obviating this complication. Now as an operative procedure, as compared with the Cæsarean section, the Porro operation clearly has the advantage in three essential points; first, in the absence of the danger of hemorrhage; second, in the extra-peritoneal treatment of the cut uterus; third, in the rapidity with which the operation can be completed. It appears, also, that even with the bettered results of hysterectomy, the Porro operation ought to surpass them, for the following reasons; first, there are no complications of adhesions; second, there is no implication, either directly or indirectly, of any important viscus, and accordingly there is less hemorrhage; third, there is less shock. So far as the technique of the operation is concerned, it is less complicated than that of the simple Cæsarean section, and in its complications far less formidable than the average hysterectomy. The suturing of the uterus, as necessary in Cæsarean section, prolongs the operation, and imposes a time consideration of vast importance in all abdominal operations. The factors of uncertainty in the healing of the uterine incision contradict, and in great part negative all our established

ideas of exact surgery. We have here an incision which it is impossible to put at rest. The tissue within the embrace of the ligature is not at rest. The uterine tissue itself is not stable, but is undergoing metamorphosis and degeneration. A suture such as this in any other part of the body would be unthought of by the intelligent surgeon. It is only tolerated here, because it is the best that circumstances and anatomical surroundings will permit of. Under such conditions the danger of leakage and peritonitis are always present in no small degree, and cannot be minimized. This is not true of the extra-peritoneal treatment of the succulent stump. Here the use of the ecraseur is the ideal treatment, because it adapts itself to the conditions, in that it can be contracted upon the shrinking stump, and the hemorrhage absolutely controlled.

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The operative side of the question has thus been conclusively dealt with, I think, and the showing is not unfavorable to the Porro operation. There remains to consider the ethical—or, if you please, the sociological—side of the question. First, the interests of society in general; when we remove the uterus we sterilize the woman. Have we a right to do so? To answer this, we must ask: In what light is the pregnant woman to be considered? Is she to be regarded as a propagating organism whose life is in no wise to be considered apart from her procreative power, to which all else must be sacrificed? Are her relations to family and friends of no account compared to this? Is the Cæsarean section, which gives her a possible chance for future child-bearing to the detriment of her present family, to be preferred to the operation which gives her the best chance for future usefulness apart from child-bearing? Before we answer these questions, the subject must be looked at from the standpoint of the children who might at some future time be delivered by the Cæsarean section. It must be remembered that the dangers of child-birth are here enhanced, and the chances of living greatly diminished. If we then choose the Cæsarean section in order to permit future child-bearing, we are doing so with a knowledge that we are subjecting the mother to its perils without reasonable assurance that this can be compen-

sated for by the value of the life of her child. Mathematically we are substituting a variable for a constant. The logical deduction from the last statement is, that with a dangerous operation we are not justified in exposing the mother again to its perils, when the ends attained are in no wise certain to be what is desired.

In other words, the Porro operation, skillfully performed, is safer than the Cæsarean section, and practically leaves the mother, so far as ultimate results are concerned, in the same relative position to the community as a child-bearing agent.

This answers the first series of questions; for if, with less danger to herself, she is left in the same relative position, it is her right to demand, and the surgeon's duty to perform, the operation which will preserve her usefulness to her family and the community.—*Annals of Gynecology.*

PHYSICAL AND MENTAL CHANGES AFTER REMOVAL OF THE OVARIES AND AFTER EXTIRPATION OF THE UTERUS.

The author's paper is based mainly upon the analysis of a mass of data furnished by the experience of a large number of gynecologists. In cases in which the ovaries are removed, menstruation ceases at once, or after a short time, in 88 per cent. of them; in 12 per cent. it continues at rare intervals, and in small quantities. This cessation in so large a majority of cases is explained on the theory that the impulse to menstruation proceeds from the ovary, and consequently ceases when the latter is removed. Substitutes for menstruation, or atopomenorrhea, occurred in very few cases. In about half the cases analyzed, the molimina menstrulia still recurred, probably in obedience to habit, and recurring irritation of the uterus, proceeding from the proper nerve centres—this causing hyperemia. The customary phenomena of the menopause were present, in most cases—*hot flashes*, dizziness, leucorrhea, sweating, etc. As a rule, there was also atrophy of the vagina and uterus. If the uterus was enlarged from myomata or chronic inflammation, it usually became contracted to the normal, or less than the normal size. The

general nutrition of the body was improved in most cases, and in 42 per cent. there was decided stoutness. In most of the cases sexual desire was notably diminished; in some it was altogether extinguished; and in a few it remained unaffected. The mental condition suffered deterioration in almost all cases, and it frequently amounted to melancholia. It would seem, therefore, that removal of the ovaries results in a climacteric which in all respects, is like that which occurs naturally.

After the removal of the uterus, menstruation ceases in all cases, and atopomenorrhea, to any extent, never occurs. Molimina menstrulia recur regularly for a short time, with pain and annoyance in the abdomen. This is explained by the continuance of ovarian activity, and the reflected pelvic hyperemia, which still recurs monthly. The removal of the uterus exercises no particular influence upon the genital organs which remain. The vulva and vagina are changed, and so in the main, are the ovaries; although after a few years, these gradually undergo atrophy. Ovulation also continues without interruption until the climacteric. The influence upon the general nutrition of the body is usually favorable, although there is not usually that increase of weight which follows removal of the ovaries. Sexual desire is very little influenced as long as the ovaries and the clitoris remain; exceptionally it is diminished or extinguished. As to the mental condition, there was no change in half the cases analyzed; but in about a third of them there was more or less depression, which not infrequently developed into psychoses. In general, the changes after removal of the uterus are less, and of less significance, than after removal of the ovaries.—*Glaevecke, Arch. f. Gyn., Bd. xxxv, H. 1, Annals of Gynecology.*

LIST OF BOOKS

Included in Volumes I, II, III and IV, Wood's Medical and Surgical Monographs.

JANUARY.

THE PEDIGREE OF DISEASE. By Jonathan Hutchinson, F.R.S., late Professor of Surgery in the Royal College of Surgeons; Emeritus Professor of Surgery in the London Hospital; President of the Ophthalmological Society, etc., London, England. A reproduction of the English edition. 100 pages.

TREATMENT OF COMMON DISEASES OF THE SKIN. By Robert M. Simon, M.D., Cantab, M.R.C.P., London, Senior Assistant Physician to the General Hospital, Birmingham, England. Reprinted from the English edition. 45 pages.

VARIETIES AND TREATMENT OF BRONCHITIS. By Dr. Ferrand, Physician to the Laennec Hospital, Paris, France. Translated from the original French edition. 100 pages.

FEBRUARY.

ON GONORRHŒAL AFFECTION IN WOMEN. By William Japp Sinclair, M.A., M.D., Hon. Physician to the Manchester Southern Hospital for Women and Children, and the Manchester Maternity Hospital; Late Examiner in Midwifery and the Diseases of Women and Children, University of Aberdeen, Scotland. Reprinted from the English edition. 130 pages.

ON GIDDINESS. By Thomas Grainger Stewart, M.D., F.R.C.P.E., F.R.S.E., Physician in ordinary to her Majesty, the Queen, for Scotland; Professor of the Practice of Physic and of Clinical Medicine in the University of Edinburg, Scotland. Reprinted from the foreign edition. 35 pages.

A CRITICAL STUDY OF THE CLINICAL VALUE OF ALBUMINURIA IN BRIGHT'S DISEASE. By Dr. Pierre Jeanton, Late Interne of the Hospitals of Paris, France. Translated from the original French edition. 90 pages.

MARCH.

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JUNE.

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DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

EDITED BY
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Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

INTERESTING CASE OF SYPHILITIC IRITIS—ABSCESS OF THE IRIS AND EVACUATION OF ITS CONTENTS.

JAMES L. MINOR, M.D., MEMPHIS, TENN.

During the past spring I treated a case of syphilitic iritis, which was interesting because of its variety, for I have never seen its counterpart; instructive because of its history, for it was characteristic of the general disease—syphilis—upon which it depended; and gratifying in its results, for so perfect a recovery from so severe an attack rarely occurs, and, too, some points in the treatment were novel and successful.

The notes of the case are as follows:

On February 2, 1889, Dr. Alexander Erskine referred to me for treatment A. V. M., æt. 39, an iron-moulder, who gave the following history:

Ten days before the right eye and cheek were burned by molten metal. The eye became red and painful at once, and vision was seriously impaired. This condition continued up to, and was complained of at, the time that I saw him. The burn of the cheek was slight; it gave little trouble, and was practically well; nor could I discover any lesion of the eye from the burn. I did find deep ciliary injection of the globe, haziness of the anterior chamber, a contracted and stationary pupil, which yielded irregularly to atropia; and, projecting from the tissue of the iris, in its lower and outer quadrant, was a well defined cauliflower-like mass, with a yellowish apex and reddish-yellow base, the redness being due to minute blood vessels which radiated from the base toward the apex. His vision was so much reduced that he could count fingers only at a distance of two feet from the eye. The picture was a typical one of syphilitic iritis, and the diagnosis of syphilis could have been made by these appearances alone. Inquiry

elicited the fact that he had had a chancre a year before, followed by swelling and soreness of the glands in the groins and neck, whitish sores in the mouth, ulcerated sore throat, and a general cutaneous eruption. He was seen by a physician who pronounced the trouble syphilis, and treatment was instituted which caused a disappearance of the troubles for which he sought relief. The medicine was then stopped, and no other evidence of syphilis was experienced until shortly after the eye became sore, when there was an eruption of slightly elevated, copper-colored spots over the general cutaneous surface. The throat became sore at the same time, and ulceration of the pillar of the fauces was observed on the right side. Atropia was used vigorously, hot fomentations were applied to the eye, and leaches were applied to the temple. Mercurial inunction was resorted to, and that remedy was pushed to the limit of endurance; but in spite of all that could be done the activity of the disease remained unchecked for one week. During this time the gumma of the iris increased in size until it pressed against the cornea; its apex became yellower and broader, and finally it became evident that it contained pus in its interior. Nothing that I could do afforded any relief; suffering was intense, and vision was practically useless; the tension of the globe was increased, and there was clearly pus in the eye which should be evacuated, and I decided to remove it by aspiration. The eye was cocainized, and a hypodermic needle was inserted through the cornea and into the center of the gumma or abscess. The piston of the syringe was drawn out, and an honest drop of pus followed it. This was followed by collapse of the walls of the sac from which the pus was evacuated. The syringe was withdrawn, the eye was bathed with hot water, atropia was instilled, and a compress bandage applied. The immediate effect of the operation was to intensify all of the former symptoms; but in a few hours marked relief was afforded, and when I saw him the next day the eye was clearer and in better condition than it had been since he had been under treatment. There was but little left of the gumma or abscess. In two weeks the eye was free from redness, and I directed him to continue the treatment for a week longer and then to report to me.

He stopped all treatment and went to work again, but had to stop two weeks later, on account of the development of the same trouble in the left eye that he had experienced in the right one. He came again to me, and I found a well developed case of syphilitic iritis. There were three distinct gummatous-looking formations projecting from the tissue of the iris into the anterior chamber, one near the lower margin of the pupil, and one on the right and the left side respectively. Vision was much reduced in this eye (fingers at ten feet), while the sight had greatly improved in the eye which was first affected ($\frac{20}{100}$). The same line of treatment was adopted, and the disease behaved in much the same way, except that the outer and lower tumors of the iris went on to suppuration and spontaneous evacuation of their purulent contents into the anterior chamber. This occurred about a week after the eye became sore. All appearances of the abscesses which had ruptured soon passed away, and the remaining tumor, near the lower margin of the pupil, gradually disappeared by absorption. The pus was absorbed from the anterior chamber in a few days, and improvement went rapidly on. Three weeks later local treatment was stopped, but the general treatment was continued, the *mixed treatment* being substituted for inunction. Vision at this time (March 28) $\frac{20}{70}$ in the eye first affected, and $\frac{20}{200}$ in the left or last affected eye. He was seen again on May 5, when his vision was found to be $\frac{20}{28}$, or practically normal, in each eye.

THE BROOKLYN EYE AND EAR HOSPITAL.—The Annual Report of this institution—our *alma mater*—has been received, and we are gratified to see the record of work and progress which has been made. The number of new patients treated during the year was 9031; the number of surgical operations performed 1099, and the number of patients treated since the Hospital was founded, 21 years ago, 96,726. The tabular form of the report makes it a valuable statistical record of eye, ear, nose and throat diseases, and the writer looks with pardonable pride upon the stupendous figures which have been added to the tables prepared by him while House Surgeon of the Hospital ten years ago, for the first report of the kind published by the institution. An interesting table, furnished by the Superintendent Mr. Chas. Meyer, is one showing the number of new eye and ear patients by month since the Hospital opened in 1868.

SYNOPSIS OF
THE CHARGE TO THE GRADUATES
OF THE MEMPHIS HOSPITAL MEDICAL COLLEGE—CLASS OF 1890

BY PROFESSOR T. J. CROFFORD.

One hundred years ago there were great questions before us—questions capable of creating great orators. The oppression of the mother country awakened the dormant energy, and drew out the impassioned eloquence of Patrick Henry. A little later the stalwart form of Webster arose among men and a deep-toned voice cried, "Independence forever." After a more critical survey, it was found that as long as bond slavery existed we were not truly a free people, and the clear, eloquent voice of Phillips was heard in the land. Our national independence is long since established. Slavery is abolished. Temperance has become a political issue. There is not likely anything to arise to pull at men's heart-strings and goad them to eloquence like that of the past. We have only side issues to contend over, a little litter to clean up. We are passing out of the age of destruction into construction. This is the day when platforms are giving way to laboratories. It is well for us that the world is developed up to the point of asking for proof. This is the normal action of the scientific mind. The scientific mind demands verification. It is not satisfied with the imperfect, while the perfect is attainable. It will not give out results unless they exactly agree with the living facts in nature. It is on this account, that in this ever-changing world, 'midst the continuous mutability of things, that science is the great fortress of adamant that laughs at the surging storms which play around it as the old rock heeds not the ocean's waves though furious in their maddened energy.

My enthusiasm is not so much for science *per se* as for the result. Science is the means, and truth the end. I will here take occasion to warn you against the one-sided application of science. It is not entirely iconoclastic. There is a constructive, as well as a destructive side. I would like too, to warn you against considering only facts. Facts are gross

things when compared to law, principles, truth. There is no more distinguishable difference between an ignorant or uncultured mind and an intelligent or cultured mind, than its way of taking the phenomena of nature. The former sees only the facts, the latter penetrates beyond mere physical sight, and with the mental eye comprehends the relation between these. He beholds something infinitely grander than facts; he perceives that there is an invariable relation between variable phenomena; he discovers the law, the principle, the truth. Upon the immutability of law, the possibility of science depends. Facts are fleeting and changeable. Truths are forever stable. One truth may compass a myriad of facts. Let us remember that facts are not discoverable, but are patent to the grosser senses, and truths which are hidden within the labyrinth of nature are alone capable of discovery. Let us strive to become scientists in its higher meaning.

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Medicine was born of the spirit of humanity. There was suffering, then there came an effort to relieve. The earth continues to suffer as if from the weight of an excessive burden. Nature is still out of tune, and harsh. The voices of ill-omened birds are still crying out of the shadows of the past. Streaming blood, overcrowded graveyards, continue. The mothers are in tears and the children are weeping. These formidable pleaders are still with us, and always touch the strings of great hearts and sink down deep into the abyss of great souls. It was from this stupendous source that medicine came.

Notwithstanding the great differences between the life of the Doctor and other avocations, you will find in the end that it takes the same elements in almost the same proportions to make a success of it that other employments require. The many alluring "short cuts" to fortune will fail you here just as in other avocations. A little trickery which may give you the advantage for a time will ultimately recoil upon and crush you here, just as it will do and should do in any other business. You should make your resolutions high, you should adopt right as your high ideal, your polar star, and hold it as your first and your last love. You should have it corruscate and

burn in your professional firmament. Then when temptations like a dark and lowering cloud, come upon you, let this guiding star appear. Stand by the right; it may at first be a cold and lonesome stand, a babe in a manger again, but the life of right will have heaven and earth for beams and rafters, science and morality for symbols and illustrations, and by and by as it moves along, it will gather beauty and music and pictures and poetry.

Bear in mind that the world is an eagle in his eyrie watching your conduct. Remember your *alma mater*—your foster fathers will always feel an interest in your welfare. Your success is our success. We shall frequently inquire after you and be sorrowful if you have not done well. Should you err, and perchance should anyone of you stray away out upon the bleak mountains of professional sin, remember there is some one watching and caring for you. However low in the scale you may have descended, do not forget that there is a *high ideal of professional honor.* If all your friends should desert you and leave you in the lonesomeness of a moral night, though the ideal is far from you and the sneers and hisses are thick about you, I beg you still look up. The same star will be there. It does not look like it once did. It is hazy now, and the long, penciled rays play hide and seek because you see it through your tears. Oh, wanderer, return; tired child, come back home.

Life is mainly what you make it. You receive from the world as a rule, what you give it in exchange. The echo will be repeated with the most exact modulation. In my own limited experience, I have seen the chronic pessimist possessing talent come far below the less richly endowed optimist. I have seen the frown go down before the smile. Even the inanimate things of nature conserve one another. The bee and the breeze aid the flower to bloom and propagate. Let a man conclude there is no such thing as friendship, let him lose confidence in a loving humanity, *and that man swims against the natural current of things.* That man makes life hard. But let him realize that the sun brings more yearning germs up into life and beauty than all the stormy tempest blasts. Let him realize that there is a subtle

law of love and progress behind it all, and that man *joins the vast tide of the universe* which is the only road to true glory. I would rather infuse into your souls tonight and have you carry home with you the science of a loving humanity than all the dead languages and higher mathematics the world has ever known.

The exuberant soul will make friends and mistakes. He will suffer by reason of too easy confidence. He will gain wisdom from experience and his sympathies will grow on account of his sorrow. He will taste the pleasure of true friendship and the disappointment of misplaced confidence—the joy of love and the agony of loss. Out of the grave of his murdered faith will arise the star of hope. He will alike mount the heights and go down to the depths of feeling. He will know what life means. He will hunger, struggle, and perhaps kiss the cheek of death and range the scale of passion till his soul is deep and wide and soft with sympathy. Then since sorrow cannot always brood over the shivering forms that drink her warmth, his better nature will be touched into life, his high ideal will present itself, and peace will come like a gentle river. Oh rippling stream of time, oh laughing river of life, ebb and flow on in your restless course till your silvery waves ring out as they lap upon the shores of the limitless ocean of perfection.

There is a soaring bird upon which the beautiful valleys, the hilly slopes, the babbling brooks and blooming meadows make no impression, but a festering carcass rivets his eye and ravishes his being. He has found what he desires. Nature is quite as kind to supply men with what they want. A man usually finds what he is looking for. The world is just what you make it. The echo rings out above our heads and is wafted upon every wave, and the man is just what he is. I would not give an exuberant soul, an impressible nature, out of which something can grow, for one hundred cold, critical pessimists, the thrusts of whose cynical beaks spread gloom and depression everywhere. The heart that does not beat cannot be broken. The cynic cannot fall, because he will not climb. He cannot suffer, because he has never yearned.

He may eke out his methodical existence, but in reality he has never lived, because he has never loved.

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Not long since the genius of man peered through the semblance of things, and putting together such words as mâter and mother, bhrâter and brother, stâras and stars, has convinced us that the English and Hindoos had the same language originally. "When the people of Hindoostan in the last century came under the British power, they were regarded as a debased and alien race. Their complexion reminded their conquerors of Africa. Their divinities were hideous monsters. Their social system was anti-human and detestable. Suttee, Thuggee, Juggernaut, all sorts of cruel and shocking abominations, seemed to characterize and degrade them. The proudest Indian prince was, in the sight and ordinary speech of the rawest white subaltern, only a 'nigger.' This universal contempt was retorted with a hatred as universal, and threatening in the future most disastrous consequences to the British rule. Then came an unexpected and wonderful discovery. European philologists, studying the language of the conquered race, discovered that the classic mother tongue of Northern Hindoostan was the elder sister of the Greek, the Latin, the German, and the Celtic languages. At the same time a splendid literature was unearthed, which filled the scholars of Europe with astonishment and delight. The despised Asiatics became not only the blood relations, but the teachers and exemplars, of their conquerors. The revolution of feeling on both sides was immense. Mutual esteem and confidence to a large extent took the place of revulsion and distrust. Even in the mutiny which occurred while the change was yet in progress, a very large proportion of the native princes and people refused to take part in the outbreak. Since that time good will has steadily grown with the fellowship of common studies and aims. It may freely be affirmed at this day, that the discovery of the Sanskrit language and literature has been of more value to England in the retention and increase of her Indian Empire than an army of one hundred thousand men."

This is but one among the many lessons which the science

of languages has taught, and the lessons from a critical study of philology are not different from any and all other departments of science. The greater the dissemination of scientific learning, the greater the integration of the world. He who establishes a fact puts in a rivet of steel. To my mind, the constructive side outweighs the destructive. It only destroys what should go, and keeps aglow with life the true and useful. There has been great progress in philology within the last half a century. Lessons which a short while ago were scouted as absurd are now accepted by our most classical scholars, and these lessons which are apparently discovering a new world are in reality recovering an old one. In few departments of science is the constructive tendency better shown than in philology; and perhaps nothing serves better to bring nations together than to understand that their language had originally the same father. Whenever you establish a fatherhood, a brotherhood is sure to follow.

Pursuing this line, if we only had the time tonight, I should like to study with you specially one phase of nature and learn from it some valuable lessons. I should like to go over with you the conservatism of the forces. I should like to help you appreciate the correlation of all the sciences and the kinship of all philosophies, whether resurrected out of the dingy past or startling present. I should like to have you understand that amidst the apparent heterogeneity of things, there is in reality a homogeneity—that the apparent fixed gulf, the radical differences which appear, do not in reality exist. I should like to have you appreciate the red thread of necessity and kinship which winds through all the changeable forms in this world of facts and truths. I would have you understand that every fact throughout the vast realm of nature is kin to every other fact, and like a loving brother reaches out to the uttermost parts of the universe to sustain all others. I should like to have you appreciate that there is not a weak or cracked link in the chain which binds the first to the last of things, and that all nature is dovetailed and cemented together, in one great monistic whole, and that there is a throb of kinship from sands to stars. But above all, young gentlemen, I should like to have you feel

that every honorable practitioner of medicine is your brother in serving humanity, whether he happens to represent your particular school of thought or not. I am so tired of this pharsaical business—tired of isms and pathies—tired of so much parliamentary tactics in our societies—and I grow weary indeed when a talented, modest gentleman, as I have seen, with brains in his head, gets up to talk; and some simlin-headed fellow covered all over with conceit, with only sense enough to insure the lodgment of a few formulas and with a squeaking voice rasps out in the audience, "*Mr. President, the gentleman is out of order.*" I tell you, young gentlemen, we want to learn something for the cure of our fellow man, and I would just as soon it came *out* of order as *in* order; and just as soon it came from some other school of thought as our own. It is the valuable idea, the useful knowledge, that we want, irrespective of its source. It is the fruit, and not the root of the tree, that satisfies.

I have heard of two members of a German peasant family named Klein. One translated his name (Klein) Small, and the other (Klein) Little. Small and Little lived in the same street fifty years, and only discovered that they were brothers when their old mother in Germany died and left some money to be divided between them if they could be found. Oh, Small and Little, how very *Klinish* you both appear. You must wait fifty years to find out your brotherhood. Young man, you are a brother to every one who is striving to carry the torch of chemical or physiological research forward; a brother to every one who is striving to carry the race toward the goal of physical perfection. The mother of us all whose name is dogma, is passing away. The narrownesses and prejudices are dying with each turn of the wheel of progress; dying, surely dying out of the civilized world, and to you and to me she is leaving a grand heritage of freedom and love. Must we wait till we are old, wrinkled and past the age of usefulness to find out that we are brothers?

Truth will shine differently in different localities. No two will see it alike, but each age must give it a garb. It must be dressed in the fashion of the times. It is invested with the legends, rites and speculations rife among those who suc-

cessively had charge of it. New sciences, races, aims, must weave new raiment for it. These investitures must necessaily pass away with the uncritical times that gave them birth. We belong to a reasoning age. No more are we to suffer the disastrous consequences of a slavish adherence to obsolete forms and barren dogmas. Our eyes are open to the follies of the past and the needs of the present. We must be explicit. We must be reasonable. Ours must from this time forward be a growing profession. It must shed its leaves when it is time for the leaves to fall, and sprout and bud and blossom when these seasons come. It must be dead no more.

Let us not be hide-bound sectarians. Truth is broad as the universe is broad, and deep as the sea is deep. Why should we be narrow? There is some truth in everything that has ever had a strong hold upon the minds of men. The moment the truth is all out, the spirit is gone, and only the dry formulas remain, only the ghastly temple is left, around which play but the shadows of its former self. Let us be careful whilst we are squabbling lest the life of the soul should leak out and we find only the bleached bones of grinning skeletons over which we have measured swords. Souls are sensitive things. To acknowledge the truth in a school does not compel us to accept its dogmas. We can recognize truth in a school of thought and yet triumph above its narrownesses. Great thinkers have always broken over the barriers which their predecessors have erected. There comes a time when dogmas must be killed off like bees the drones. The ability to do this is to a great extent a question of intellectual growth. There is no better time, young men, to make high resolutions to cull from all the schools their gilded, glittering gems and weave them into one great profession which grew out of love for one another. If I could reach out tonight and grasp the silver cord which brings down the golden blessings of heaven I would throw it into the lap of the medical profession—the truest servants of humanity—and I would be no respecter of schools. There is no better time, I say, young men, than here before this brilliant audience to make high resolutions to grow beyond sectarian distinctions. These only show how little we are. A specific name will apply to a little man much bet-

ter than it will to a big one. Ah, brilliant young man out there, I want to fire your ambition—I want to help you grow out of all the clothes that have been cut for you. I want you to grow so large that they can't label you—so hugely great that nobody's label will go half-way round you. With no malice toward homeopathy, no prejudice against eclecticism or any other school, let us tonight launch out upon the ship of modern freedom—the swan-necked goddess of reform—out of whose starry eyes the light of tolerance and liberty is beaming. Let's have no intolerant sentiment penetrate her throbbing heart, no dogma furrow her brow. Let's have no beclouding creed circumscribe her; but as she glides upon the placid waters, let her boundaries be the silent stars above and the limitless universe around, and may nought hover o'er her save the angel of truth from the arch of the sky.

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Not a great while ago, society had no pity for the insane. They were possessed of devils, the subjects of special visitations from on high, and the world said, Hands off; you can do nothing with a diseased mind; and for hundreds of years the world tried by conjurations and tricks to frighten away the demons. As long as they did this, they were fighting at ghosts and made no progress. Strictly speaking, the mind being immaterial and intangible, is not subject to decay. There can be no such thing as a disease of the mind—only a disease of the organism through which the mind operates. You had as well complain of an abnormality of steam because your rickety engine jets it out in the wrong place, or a disease of electricity because your battery does not work properly. As a defective slide in your magic lantern will produce an abnormal picture upon the canvas, so a diseased brain will show itself abnormally upon the mental canvas—upon the conduct of the individual. There can be no such thing as a diseased mind. The pathologist armed with his scalpel and microscope has found insanity always associated with disease hidden within the organism of the individual. The result has been that insanity is frequently cured; and where a cure is not effected, the subjects are regarded as human beings suffering from disease, and not outcasts from society and human sympathy,

abandoned by man and tormented by devils. They were once imprisoned, starved, scourged, burned at the stake as witches or executed as criminals. They are *now* shielded as precious idols from the gaze of the curious world. They were once hated, abandoned by nearest relatives, wandering out alone, and looked after by nought save the stars in the sadness of the night time. They are *now* objects of the most tender solicitude, and in place of the cold, damp dews, they are moistened by the fresh, hot tears pouring from the hearts of those who love them best. Ah, young gentlemen, it is a great profession that betters the world like this. It is a great profession you are joining tonight. The aggressive anatomist has found out where the disease is located. A shield of pity now stands guard where censure once had sway. Science has destroyed the false theory and erected a true one. Science always gives something better than it takes. The constructive side always outweighs the destructive. We have lost the devils, but have gained a broad humanity. I will swap a devil for a broad-gauged man any day. To use a modern expression, I was never "stuck on 'em" much any way.

Craniology was founded by Blumenbach. A great impetus was given to it by Gall, with his philosophical idealism coupled with his anatomical studies of the brain. This has been contributed to by many modern investigators, including Broca, Lombroso, Virchow, Bischoff, Owen and Huxley. Recent researches in criminal anthropology have demonstrated that the worst class of criminals do not possess normal brains, and Benedikt in his great work just published has shown that this abnormality, which is throughout the entire organ, consists first, in a deficiency of gyrus development, and second, in an excess of fissures. Recent statistics have shown that punishing this class of criminals makes no improvement in their conduct. I wish to be understood, and will state right here that I think too highly of the office of law and justice in social life to recommend indulgence in any weak sentimentality. I do not wish to undervalue punishment as a restraint upon the conduct of certain criminals, but I would insist upon taking into account the result gained by anthropological and sociological research. I would insist upon consider-

ing all the facts and taking advantage of all the knowledge we can gain in this connection before making a cast-iron rule. I would insist upon a further refinement—a further differentiation. A punishment suited to one class is not necessary for another. Because one class cannot be reformed, it does not follow that another may not be restored to usefulness. There are two factors in the production of criminals: One is heredity, the other environment. The one is morally insane—a criminal by nature; the other is one from cultivation. In either case, humanity and science should conserve and protect them against the cruelties and barbarisms unworthy of the age of the world in which we live.

We hear a great deal about confusion in these matters. But suppose you had missed your way and strayed into a tangled wood, would you sit down by the side of a tree and in gloomy confusion wail out upon the passing winds, "Lost," or would you not take a reckoning by the stars, feel for the north or mossy side of the trees, and make an intelligent and manly effort to come out of this wilderness? Strictly speaking, there is no confusion in anything, except within ourselves. It is entirely subjective. There can be no such thing as objective confusion. Every tangled mass has its laws permeating and controlling every feature in it. The red threads of cause and effect are tied just as securely, and follow each other just as unerringly here as out where we can see in the most familiar affairs of life. The confusion must be because we do not understand these laws—because we are not able to trace these threads. The moment we can do this, the confusion is gone, and the ugly, jungled heap becomes a thing of scientific beauty. All the various affairs of life, when put together, make up a general condition of humanity. The specific features are so intimately associated, so interactive and interdependent, that the general condition must be comprehended before any special feature can be intelligently considered. Every special feature has its origin somewhere in the general. There is a law governing all these things. There is a thread upon which they are all strung. Must we continue to cry out "lost," or must we bravely take a reckoning, and with our wits about us feel for the moss upon the trees and

make a brave effort to trace out these threads and remedy the social defects? There has never been an effect without an adequate cause. There has never been a criminal that was not made so by causes, either before or after his birth. Crime has its natural history. The sooner we realize that crime is largely the natural product of an unwholesome way of living, the better. Will it not be a great day when we can trace through all the complexities of society the labyrinthine chain of cause and effect? Will it not be a glorious day when society shall have done away with crime to the greatest possible extent by, to the greatest possible extent, doing away with its cause? Will not a healthy body politic have fewer crimes against it than an unhealthy one? Before we make and enforce laws against offenses, should we not be careful that our social condition is made most unfavorable for their production? Does society owe nothing to the individual? Is it not greater to prevent than to punish crime? Should we not take the beam out of our own eye before we take off our neighbor's head?

We are rapidly outgrowing the legacy of a barbarous past. Earnest and serious thinking men and women are revolting at the idea of adding crime to crime, by the observance of "an eye for an eye, and a tooth for a tooth." Retribution should never enter our minds in dealing with criminals. Only their reformation should be considered. There should be no other aim in depriving an individual of his liberty than the protection of society and the bettering of the individual. It is quite as unreasonable to send a lunatic to an asylum for a specified time, at the expiration of which he is to be turned loose upon society, as to send a burglar to State prison to be discharged at the expiration of his sentence. The lunatic should be discharged when he is cured, and not until he is so restored that society will have nothing to lose at his hands. And a like rule should be adopted with the criminal in all degrees and variations of criminality. His term of imprisonment should expire when, and not until he is cured. But if he is not cured of his criminal propensities or tendencies then there was nothing which demanded his incarceration at first which does not still exist, and it is quite as wrong to give

him his liberty now, as in the beginning. The mere fact of his having served out a sentence does not make him a more desirable member of society. But if a man be cured of his criminal inclinations and is reformed, society has no right to keep him from liberty another day.

When Mr. Eden, the good chaplain in Charles Read's story, succeeded in getting a female convict to gild a wooden dog, he changed an untamed, incorrigible creature, more like wild beast than human, into a trembling, loving woman, eager with vague desire after a beauty of life which was gently warming into activity her better nature. May it not be that in many criminals there is a dormant sight for the beautiful, a latent energy for the good, which if we will only awaken we may restore to society one who will never again harm it?

The day for tyranny of government is done, and in its stead is growing a far-reaching humanity. The constructive side of science is well shown here. The idea upon which government should act in every case should be that of redemption or conservation, instead of retaliation or destruction. The poor creature should have opportunities never before enjoyed for a moral education. Instead of being imprisoned 'midst a miserable environment or cut off in the height of his sin-stained career, we should quicken his conscience, awaken his moral nature, and fit him not only for this world, but for all the worlds that ever can come.

We see the decrepid hunchback with his pale face, screaking joints and uneasy, shuffling gait; and as we behold him with his prominent bumps so illy prepared to do struggle with the cold, competing world for his bread, our better nature triumphs and the tears flow freely. There are bumps in the brain, moral bumps, just as demonstrable to the accurate dissector as those upon the outside, and the man who carries them is just as much deserving of your pity and your tears as though he wore them upon his exterior.

The world is certainly growing better. This aggressive and ever restless humanity is truly beautiful and inspiring. It is a fact that the anatomist was at work critically dissecting, carefully analyzing, and calling attention to these anomalies in the brains of those inured to crime, prior to the

modern change of view which doubtless will revolutionize our whole system of penology. It is gratifying indeed to realize what a great influence our beloved profession has exercised in the development of one of the grandest achievements of the modern world. Tears now fill eyes where vindictive passion once had its savage flash. A shield of pity is now growing up where cruel censure once held unbridled sway. Ah, young gentlemen, it must be a great profession that betters the world like this. It is a great profession you are joining tonight. There is a great work opening before you that perhaps you had not thought of.

All facts are kin, all philosophies kin, and our dear old profession seems not only to be kin to all, but wants to extend its healing influence over all. Always aggressively constructing on the side of humanity. Always far-reaching in its effects. Always excelling other avocations in the race of real progress. Always yearning and reaching outward and upward. Always begging of nature to yield her secrets that others may be bettered. Always quickening the consciences and building up the souls of men. Always chivalrously leading the way in a grand and glorious cause. Talk about your gallant soldiers in the front ranks, fighting for a higher goal. Talk about your panoplied knights riding the avenues of life and righting the wrongs of the world, but give to me the glory of that profession which triumphing beyond all rough force can tease from all systems and philosophies their serenest, purest gems, peacefully weave them together, and in one great herculean effort, bring forth the dearest child in all the ages born. Lie still my love, lie still, and dream of the halcyon days to come. Lie still, my love, lie still, while we plait a wreath upon her brow and christen her the sweetest name in all this world. It is the name of CHARITY.

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Original articles and clinical reports solicited. Contributors are notified that all matter forwarded us, is received with the distinct understanding that said matter has never appeared in print, and will not be allowed to appear in any other journal prior to its publication in this. All such matter should be sent directly to the editor to whose department it pertains.

Secretaries of medical and surgical societies will favor us by sending dates of regular meetings, with brief programme of important subjects coming before the meeting.

All matter must be in our hands on the tenth of the month preceding its publication.

The JOURNAL will be issued on the fifth of each month.

All communications other than provided for above, should be addressed to

JAS. L. MINOR, M.D., Editor,
Memphis, Tenn.

MEMPHIS HOSPITAL MEDICAL COLLEGE.—This institution has just closed its tenth annual course of lectures, and its friends will be gratified to learn that the progress has been onward. We can assure them that this has been the most satisfactory year known to both the Class and Faculty. One hundred and ninety-six students were in attendance, and sixty-three received the degree of Doctor of Medicine.

The Commencement Exercises held on the 28th of March were attended by quite a large and fashionable audience. The exercises were interspersed with choice selections of music, under the direction of Prof. Winkler, and all passed off most agreeably.

The salutatorian and valedictorian acquitted themselves with much honor to the Class whom they represented. The charge to the graduates by Prof. T. J. Crofford was the event of the evening. The Professor left the well-worn path (of which we have all grown weary) of advising the younger of the profession how to conduct themselves, and delivered a

most interesting dissertation, which will be found in full in this number of the JOURNAL. The following is a list of the new graduates of the College:

T. S. Chaffin,	J. W. McGaha,	G. P. Smith,
A. C. Jack,	J. H. Mahan,	C. W. Alexander,
S. H. Hillin,	G. W. Stewart,	B. G. Wood,
J. J. McGowan,	J. D. Barfield,	P. Gibson,
J. H. Newell,	W. H. Metcalfe,	J. R. Williford,
J. D. M. Black,	J. E. Arrington,	W. J. Gullege,
F. B. Tyree,	C. O. Bryan,	W. E. Atkins,
M. W. Brian,	T. M. Tramel,	G. M. Jameson,
B. D. Woodson,	W. C. Sanders,	T. M. Dunagan,
J. C. Lusby,	T. W. Largent,	J. P. Sims,
J. A. Green,	I. R. Majors,	O. B. Hunter,
J. W. Cochran,	J. M. Campbell,	R. F. Winston,
G. H. McCain,	S. H. Howard,	J. A. White,
W. E. Carruth,	W. L. Goddard,	D. O. Holmes,
E. W. English,	C. F. Peck,	J. F. Curtis,
J. A. Crisler,	F. L. Shereer,	J. B. Hudson,
F. M. Dooley,	W. T. Poston,	R. J. Bigham,
W. P. Ford,	W. L. Maley,	J. W. Roane,
R. K. Ferguson,	B. H. Coper,	B. E. Selman,
W. L. Day,	W. C. Spoon,	A. Sheffield,
L. H. Miller,	T. N. Keoun,	J. L. Persons.

TENNESSEE STATE MEDICAL SOCIETY.—The Fifty-seventh Annual Session will be held in Memphis, April 8th, 9th and 10th, at the Gayoso hotel.

The hotel rates will be, at the Gayoso and Peabody hotels, $2.50 per day; at Gaston's and Luehrmann's hotels, on the European plan, $1 per day for rooms.

A one-third reduction in railroad fare will be given over all roads in the State going to and from Memphis. Full fare must be paid for tickets to Memphis, and a certificate of purchase obtained from the ticket agent. This certificate, after endorsement by the Secretary of the Society at the meeting, entitles the holder to a return ticket at one-third of the full fare.

The following papers have been promised: Recent Progress in Our Profession, President's Address—Duncan Eve, M.D., President, Nashville; The Triune Man—G. W. Drake, M.D., Chattanooga; Diabetes Mellitus—P. F. Ford, M D., Memphis; Eye Symptoms in General Medicine—J. L. Minor, M.D., Mem-

phis; A Resume of Surgical Cases in a Country Physician's Practice—T. J. Happel, M.D., Trenton; The Use and Abuse of Antipyretics—J. S. Cain, M.D., Nashville; Endocarditis and its Differential Diagnosis—J. A. Witherspoon, M.D., Columbia; Report of Eight Ovariotomies in the Last Year—B. P. Key, M.D., Chattanooga; Hypermetropia—N. T. Dulaney, M.D., Bristol; Dysentery in Children—J. P. C. Walker, M.D., Dyersburg; Incontinence of Urine in Children—A. J. Swaney, M.D., Gallatin; Blindness—F. T. Smith, M.D., Chattanooga; Pneumonitis and its Treatment—P. H. McKinnie, M.D., Hickory Valley; The Abuse of Quinine—W. C. Bilbro, M.D., Murfreesboro; Teeth Extraction—L.C. Chisholm, M.D., Orlinda; Report of a case of Placenta Previa, with Comments—W. F. Rochelle, M.D., Jackson; Report of a Case—J. H. Blanks, M.D., Nashville; Action of Certain New Remedies—W. M. Vertrees, M.D., Nashville; The Importance of Early Treatment in Middle Ear Disease—N. C. Steele, M.D., Chattanooga; The Work of the State Board of Medical Examiners—T. J. Happel, M.D., Trenton. A volunteer paper by Bayard Holmes, M.D., editor of *North American Practitioner*, Chicago, Ill.

Mississippi State Medical Association.—The Twenty-third Annual Session of the Mississippi State Medical Association will convene in the city of Jackson, April 16.

This meeting promises to be the most interesting of any yet held.

The railroads have made reduced rates to delegates and members. A one-third reduction in railroad fare will be given on all roads in the State, provided, on purchasing your ticket at the starting point for Jackson, you take from your local agent a certificate of having purchased same. The Secretary endorsing this, will entitle you to return home at one-third usual rate.

In addition, to the Committee on Special Medical Topics, the following papers have been promised: Some Cases in Gynecological Surgery—T. T. Beall, M.D., Vicksburg; Obstruction of the Bowels, Report of Two Cases, and Herniotomy—Recovery—T. B. Nimocks, M.D., Lawrence; Craniotomy — P. J. McCormick, M.D., Yazoo City; Three Cases

Orthopœdic Surgery—S. K. Coleman, M.D., Canton; Tracheotomy for the Extraction of a Grain of Corn — Chesley Daniels, M.D., Holly Springs; two unoriginal papers, by a friend; one entitled, What Makes Us Mortals; the other, The Lop-eared in Our Profession—S. R. Dunn, M.D., Greenville; Operation of Hard Cataract—A Report of Twenty-six Cases—W. S. Sims, M.D., Meridian; Pistol Wound of Chest—B. A. Duncan, M.D., West Point; Lessons from a Medico-legal Prosecution—D. L. Phares, M.D., Madison Station; Malaria—Gus Evans, M.D., Aberdeen.

Hotels will give the following rates per day: Edwards House, $1.75; Lawrence House, $1.50 to $2.50; Spengler House, $1.50.

The American Medical Association meets in Nashville, May 20–23. Extensive preparations have been made for a large and representative meeting, and at this writing there is every indication that it will be one of the most successful that has ever been held. The officers of the several sections have been actively and successfully engaged in securing a large number of interesting articles from the best men in the profession. Nashville is bestirring herself that she may retain her well-deserved reputation for hospitality. The profession in the State is alive to the responsibilities which rest upon it, and will successfully meet them.

Pointed Paragraphs —The editor of *Practice* reminds us that the idea of placing *Pointed Paragraphs* at the top margin of the general advertising pages originated with him, and we are gently taken to task for not having credited him with it, when that feature was introduced into the Memphis Journal of the Medical Sciences. We gladly credit brother Winn with an idea, which we show our appreciation of by adopting. Practically the same idea is carried out by several other medical journals, and as no claim to originality had been made up to the time that we adopted it, it was considered common property. We thought the idea a good one and adopted it, and succinctly stated our reasons for doing so, thus removing any ground for the charge of imitation.

Dr. W. B. Rogers declined re-election to the Deanship of the Memphis Hospital Medical College, at the recent meeting of the Faculty. He will continue in the Chair of Surgery, and devote his time to his professional labors.

Campho-Phenique.—Dr. S. T. Yount, LaFayette, Indiana, President Indiana State Medical Society, writes: I have given Campho-Phenique a careful and thorough trial in a great variety of cases, and find it better than any known remedy that I have heretofore used. I have treated two cases of empyema with the most satisfactory results by the use of your remedy. I can cheerfully recommend it as the best antiseptic, germicide and disinfectant now in the market, and also can recommend it to the general practitioner as the very thing he needs in the treatment of various wounds, sores and injuries that he may be called upon to treat.

The East Mississippi Insane Asylum.—Dr. J. M. Buchanan has been appointed Superintendent to fill the vacancy caused by the expiration of Dr. C. A. Rice's term of service.

We are gratified to learn that Mr. Leopold Hoff, who introduced the original Hoff's Malt Extract into the United States in 1866, was awarded a silver medal at the Melbourne, Australia, Exhibition in 1889, and a bronze medal at the Industrial Exhibition at Hamburg, Germany, in 1889, for the superior excellence of his malt extract. At the latter exhibit he also received a special award of honor.

This original preparation can only be obtained in the U. S. under the style of Hoff's Malt Extract, Tarrant's, and is always to be relied upon when practitioners are in need of a safe, palatable, nutrient tonic.

Elixir of Three Chlorides.—We would call special attention to this preparation, manufactured by Renz & Henry, Louisville, Ky. After careful clinical tests, the proper proportions of the chlorides of arsenic, iron and mercury were reached to give an ideal alterative tonic. We heartily commend the Elixir of the Three Chlorides.

DR. F. L. SIM was elected Dean of the Faculty of the Memphis Hospital Medical College, at a recent meeting of that body.

DIED.—March 23, 1890, at Hudsonville, Miss., Rufus Rook, member of the Class of this year at the Memphis Hospital Medical College.

We call the attention of our readers to the advertisement of Messrs. R. A. Robinson & Co., Louisville, Ky., which will be found on another page of this issue. This firm was established 45 years ago, and enjoys a widespread reputation as a sound, honest, reliable business house. We do not hesitate to endorse their preparations as being all they claim for them.

Having spent some weeks at Orkney Springs, Va., we are fully prepared to vouch for all claims made for that place in their card. We cheerfully recommend it to physicians sending their patients off for health, especially those leaving the Mississippi bottom, laden with malaria.

We commend the firm of Myers & Berlin to all professional friends and others who may desire buggies, carriages or wagons of any description, or stand in need of repairs on any of these articles. See advertisement.

WANTED.—Wholesale druggists to handle our line of Antiseptic Dressing and Pharmaceutical preparations; correspondence solicited. Send for our new and extended catalogue and discounts which will be mailed to you, free. One trial order will convince you of the superiority and cheapness of our goods. THE LISTER MANUFACTURING CO.,
General Office and Laboratories, Bloomfield, N. J.

THE

Memphis Journal of the Medical Sciences.

MEMPHIS, TENN., MAY, 1890.

DEPARTMENT OF

PRACTICE OF MEDICINE & THERAPEUTICS.

EDITED BY

B. G. HENNING, M. D.

S. A. ROGERS, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

PROBABLY THE INFLUENCE OF COCAINE.

JAS. CABELL MINOR, M.D., WALNUT RIDGE, ARK.

Last spring in removing an ecchondrosis from the nasal septum a twenty per cent. solution of cocaine was first applied for five or ten minutes, and this not producing sufficient anæsthesia pure crystals of the hydrochlorate were laid on the tumor. Considerable excitement of an hilarious nature resulted, and following this was a corresponding degree of depression, in fact patient that night had slight rigor and fever.

He left town next evening, and upon arriving at his home several days after, he wrote me that an obstinate case of gonorrhœa, from which he had been suffering for about six weeks, subsided suddenly the night of his departure (that is the night after the operation); he noted the fact that the discharge which had been very profuse up to time of operation decreased perceptibly the night of the operation. He has since informed me that no trace of a discharge has ever reappeared.

Now whether the discharge ceased in the natural course of the disease, or from change of air and surroundings, or whether from the reflex effect the cocaine may have had, is what the writer would be pleased to have explained to him.

THE ETIOLOGY OF MALARIA.—Dr. F. Plehn, at city hospital "Moabit," in Berlin, in a paper before Berlin Medical Society, March 5, 1890, on the etiology of malaria, appears to give positive proof of the existence and identity of the malarial parasite. He reviews the various theories, viz.: noxious gases, the views of organized nature, such as palmella, macedinea, microscopical algæ, and latterly the various bacteria, spirille, cocci and bacilli, of which latter the one found by Klebs and Tommasi-Crudeli, in 1879, enjoyed the monopoly for a decade.

Laveran, a French army surgeon, was the first to discover the parasites of malaria; Marchiafava, Celli and Golgi the first to describe and study them, and who named them "Plasmodia."

Plehn found the Laveran parasites 6 times in 7 patients, in two of them before any symptoms appeared. They were absent in all the other patients at the hospital. These plasmodia are little protoplasmic lumps, ranging from a size just visible to and above that of a red blood disc. Those in corpuscles are most developed, thrive at their expense, move actively, contain one, more rarely two nuclei, and granular matter. They disappear rapidly under quinine treatment. A more detailed account will appear in the *Zeitschrift fur Hygiene. From Berl. Klin. W. by Wm. Krauss*, M.D.

A NEW METHOD FOR ARTIFICIAL RESPIRATION.—To perform artificial respiration with the greatest efficiency, requires two persons. The patient lying on the back, and, if possible, placed upon a table—one operator at the head takes a hand in each of his, and draws the arms directly upward, with a slow and steady pull, continuing the traction until the maximum of thoracic distension is obtained, which will require about three seconds. This accomplished, the traction is relaxed, without, however, attempting to press the arms against the sides. At this moment the other operator, who is kneeling or standing by the side of the patient, presses with both hands forcibly upon the chest in a direction backward and toward the median line, so as to diminish both the depth and the breadth of the lower half of the thorax. This pressure, like the traction, is to be made slowly and steadily,

and should be continued until the maximum expiratory result is attained, say two seconds. The pressure is then relaxed, and the traction on the arms follows again immediately. In this way about twelve respiratory movements per minute will be accomplished, under conditions giving the largest excursion of the chest walls attainable by manual procedure.

It will be seen that this is a combination of a part of Sylvester's method, with the method of Howard. Sylvester's method is defective, in that it does not provide for efficient compression of the thorax; the position of the operator at the head of the patient making such compression extremely difficult. Howard's plan, on the other hand, does not provide for any expansion of the chest beyond the cadaveric position, and is, upon the whole, much less effective than Sylvester's. A combination of the two, carried out by two persons, secures a very considerable approach to the results of natural respiration, the action of the diaphragm alone being unrepresented. Another very great advantage is the division of labor—either of the other methods being exceedingly fatiguing to the operator.—*Andrew H. Smith*, M. D., *of New York, N. Y., in Virginia Medical Monthly.*

FRONTAL HEADACHE AND IODIDE OF POTASH.—Since there are various forms of headache, and since the remedy that will relieve one patient, will utterly fail to relieve another with seemingly the same kind of head pain, it is necessary that the physician should be armed with a variety of remedies. For some time past we have found minimum doses of iodide of potassium of great service in frontal headache. A heavy, dull headache, situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with a distaste for food, which sometimes approaches to nausea, can generally be completely removed by a two-grain dose of the potassic salt dissolved in half a wineglass of water, and this quietly sipped, the whole quantity being taken in about ten minutes. In many cases the effect of these small doses has been simply wonderful. A person who, a quarter of an hour before, was feeling most miserable and refused all food, wishing only for quietness, would now take a good meal and

resume his wonted cheerfulness. The rapidity with which the iodide acts in these cases constitutes its great advantage.

We make no claim of originality in the use of the remedy. If we mistake not it was an Australian physician who first recommended it. The morbid condition here described is so very common, we would invite others to give this remedy a trial.—*Mass. Med. Journal.*

THE TREATMENT OF ASTHMA.—At the beginning of an attack of asthma, Dieulafoy directs the patient to paint the nasal cavities as high as possible, by means of a camel's-hair brush dipped in a five per cent. solution of cocaine hydrochlorate. If preferred, the solution may be sprayed into the nose and throat. If this application does not cause the attack to abort, the patient should be made to inhale from 1 to 12 drops of pyrodin, sprinkled on a handkerchief. When the attack is at its acme, inject hypodermically $\frac{1}{10}$ grain of hydrochlorate of cocaine, and repeat in a quarter of an hour, if necessary. The remedy *par excellence* for asthma is iodide of potassium, given in doses of 20 to 30 grains daily, but commencing with 5 grains only, and gradually increasing. To combat the diathesis, the author considers three principal medicaments: iodide of potassium, belladonna, and arsenic, and recommends the following course of treatment: The patient to take from 15 to 30 grains of iodide daily for fifteen days, then replace the iodide by pills containing powered belladonna leaves and extract of belladonna, of each 4 grains, to be made into 20 pills. At the same time he is to take a teaspoonful daily of the following solution, after the principal meal:

℞.—Arseniate of sodium, ... 1 grain.
Distilled water, ... 2½ fl. ounces.

If the chest be emphysematous, the use of baths of compressed air are also useful concurrently with the foregoing treatment.—*London Medical Recorder, February 20, 1890.*

A CAUTIOUS ANSWER.—Orfila, the celebrated doctor, being examined as an "expert" on a capital trial, was asked whether he could tell what quantity of arsenic was requisite to kill a

fly. He replied, "Certainly; but I must know beforehand the age of the fly, its sex, its temperament, its condition and habits of body, whether married or single, widow or maiden, widower or bachelor. When satisfied on these points I can answer your question."—*British and Colonial Druggist.*

COMEDONES.—For the removal of "black heads" or comedones, Dr. Unna used the following application:

China clay, ...	4 parts.
Glycerine, ...	3 "
Acetic acid, ...	2 "
Perfume, sufficient.	

The parts affected should be covered with this ointment in the evening, and, if necessary, during the day. After several days all the comedones can be easily expressed, most of them coming out on washing the parts with pumice stone soap.

Another entirely different treatment is proposed by Dr. McCasey, who, having noticed that comedones were easily pressed out of the skin of a patient who had been under the influence of ether, devised the following mixture, which he used in several cases with success:

Ether, ...	f ℥ j;
Carbonate ammonium, ...	gr. xx;
Water, to make, ...	f ℥ ij.

The liquid was applied to the affected parts twice a day. *Druggists' Circular.*

TO REMOVE POWDER STAINS.—Such blemishes are oftentimes so unsightly or disfiguring that any remedy that will remove them is worth remembering. According to *Medical Chips*, Dr. Ohmann-Dumesnil says that by painting powder stains with the following solution they will turn red:

℞.—Ammonii biniodidi.

Aquæ destillatæ, ... aa ℥j. Mix.

Then, if these red stains or marks are painted with dilute hydrochloric acid, they will disappear.—*Va. Med. Monthly.*

MATERIA MEDICA, PHARMACY AND THERAPEUTICS. By Samuel O. Potter.

This, the second edition, treats of the Actions of Medicines, Special Therapeutics, Pharmacology, etc. It is very concise and covers the ground indicated by a work of its character. It contains numerous formulæ, which would be of untold benefit to the practicing physician. For office reference it cannot be surpassed. It contains 760 pages, clear type, and is neatly bound. Price $4.00 cloth, $5.00 leather. Published by P. Blakiston & Son, Philadelphia, Pa.

OXYGEN AND OTHER GASES IN MEDICINE AND SURGERY. By J. N. Demarquay. Translated with Alterations and Additions by Samuel S. Walliand, A. M., M. D.

This work contains six chapters, embracing a history of Oxygen, a study of Oxygen, Carbonic Acid and Nitrogen in the blood in their normal state; the physiological and therapeutical action of each, as well as nitrogen monoxide and hydrogen, giving mode of and apparatus for preparing each. The comments and additions of the translator give valuable suggestions as to administration of gases and improvements in apparatus for generating. The work is one that cannot fail to be appreciated, especially as the profession are fast awakening to the value of oxygen as a medicinal agent. Price $2.00 cloth, $3.00 one-third Russ. Published by F. A. Davis, Philadelphia, Pa.

DEPARTMENT OF

GENERAL SURGERY.

EDITED BY

W. B. ROGERS, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

EPULIS—WITH REPORT OF CASES.

W. B. ROGERS, M.D.

Professor Principles and Practice of Surgery and Clinical Surgery, in Memphis Hospital Medical College.

[CONTINUED.]

Case II. J. M. Morehead, male, white, 21 years of age, was brought to me by Dr. Wooley of Mississippi, in March, 1888, with a tumor situated in the right half of body of the inferior maxilla. The growth was the size of a goose egg, was covered by mucous membrane which showed no tend-

ency to ulceration. It was firm and fibrous to the touch, and painless to manipulation. The long axis of the tumor corresponded with that of the bone on which it grew, and examination showed the body of the bone expanded to a diameter of 1¼ inches. The tumor, evidently growing from within, had separated the two plates. The two posterior grinders were present, but situated to the inner side of the tumor. Mastication was not seriously interfered with, because of the tumor projecting mostly toward the buccinator muscle. There was no loss of flesh or strength, no glandular involvement.

This tumor had been in existence about two years; had sprung up beside the root of the first bicuspid, which had been broken off in attempts at extraction one year before, for toothache which had extended over a period of six months.

The growth was diagnosed epulis, and on the following day, assisted by Drs. Wooley, Talbot and Williford, I removed a section of the inferior maxilla extending from the canine to, and including the lower half inch of the ramus. The incision through the soft parts extended along the line of the body and ramus of the bone, the flap turned up and the pliers used to cut through the bone. The wound was closed with silk-worm gut except at centre, which was left open and packed with gauze, for drainage. A rapid healing took place, and the patient left for home on the tenth day. A letter just received says, no return of the growth. The section of bone has been replaced by fibrous tissue, so that he masticates well. The scar is barely perceptible.

The gross appearance of the mass on section, was that of fibrous tissue, the general direction of its fibres being apparent to the naked eye. To the cut and feel, it was a typical fibrous mass.

The two plates of the body of the bone were widely separated and considerably diminished in thickness, by reason of the pressure exerted by the growth. The tumor had not grown forward any from the point at which it originated, behind the root of the first bicuspid, but had developed backward to the posterior extremity of the body, and had slightly invaded or inserted itself between the plates of the ramus, (selecting the canellous portion of the bone, and only displacing the compact tissue); but there is little if any room for doubting the nature of the growth—a fibrous epulis.

Case III. May, 1885, Mrs. Annie M., white, 29 years, presented a small fibroid-feeling growth, of six months duration, springing from site of R. upper dens, sapiens, which had been removed because of its giving trouble. The growth was small, not sensitive, and only a source of slight annoyance. Diagnosis, epulis. Operation included entire thickness of alveola. Nearly five years have elapsed with no return of the growth.

Case IV. Harriet Jackson, female, colored, 27 years of age, was sent to my clinic by Dr. N. F. Raines, in February, 1890. Her general health was excellent, previous history

negative, further than the usual toothache, at a site where now presented a small, smooth, firm, pear-shaped growth, between the incisor teeth of inferior maxilla to right of median line; both teeth were raised, separated from each other and loosened by the tumor, which evidently had a deep origin. There was no pain, slight tenderness, no glandular involvement, mastication greatly interfered with by the tumor, size of which equaled an ordinary chestnut. Diagnosis of epulis was made, chloroform was administered and the growth with alveola including tumor, R canine and four incisor teeth were removed quite down to the body of the bone. Hemorrhage was slight; patient returned to house that evening. Sufficient time has not elapsed to say of the permanency of result. Letter from Dr. R. says now doing nicely.

CULLINGS FROM GERMAN EXCHANGES.

WM. KRAUSS, M.D., MEMPHIS, TENN.

From a paper read before the Surgical Section of 62d German General Congress of Scientists, by Dr. Kierstein, Cologne.*

EXPERIMENTAL PATHOLOGY OF ILEUM.—Author demonstrates preparations from two dogs, in whom he had resected large portions of intestine, leaving attached by root of mesentery and reattached them in inverted position, i. e., directing the lower end toward the pylorus and vice versa.

This procedure caused no noticeable functional disorder; the animals ate with relish, never vomited, defecated regularly, remaining perfectly well, but gradually lost a little flesh.

One dog was killed 7 weeks after operation; the other, in whom about one-fourth of the small intestine had been reversed 3 months after operation, being then quite well. In both, a short portion, whose centre corresponded to the upper suture, was rather considerably dilated, the muscular coat hypertrophied. The balance of canal was perfectly normal, being neither dilated nor hypertrophied. The entire reversed portion must have propelled intestinal contents antiperistaltically (in the sense of original position). He thinks this is

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*Centralblatt fur Chirurgie, No. 5, 1890.

the first exact experiment on record to demonstrate the power of (dog's) intestine to act antiperistaltically under certain conditions without any other than the physiological stimulus of its contents.

He thinks dilatation of upper portion is to a certain extent an expression of the resistance of the reversed gut to the antiperistaltic form of motion required of it, a certain portion of contents being repeatedly driven in direction of pylorus, meeting the portion forced downward above, thus causing dilatation, with compensating hypertrophy.

ARTHRECTOMY OF ASTRAGALUS.—Paulsen (Copenhagen) successfully replaced an astragalus which had been removed in an operation for arthritis and placed in a 0.6 per cent. lukewarm chloride sodium solution. Although later compelled to remove it permanently for recurrence of joint trouble, he recommends a renewal of experiment in appropriate cases. *Therapeutische Monatshefte, Feb., '90.*

An analogous case is reported by Professor v. Mosetig of Vienna, who successfully removed olecranon temporarily to scrape a carious joint in a little girl. He advocates the method as affording easy access to joint and preserving muscular attachments. Patient was presented before Vienna Imperial Royal Society of Physicians. She could pronate, supinate, flex and extend actively.

In the discussion following, v. Dittle lauded the great advantages of the method, having employed it in an operation on the os calcis.—*Berl. Klin. Wochenschrift, Jan. 13, '90.*

R. Köhler reports in Charité-Annalen a case of a servant girl who had fallen off a ladder on to a burning lamp, the chimney entering the perineum. She was admitted to the Clinic a week afterward, when on examination with a catheter, fragments of glass were felt in the bladder. They were extracted through urethra without difficulty (!), 14 in number, the largest being 2 inches long and 1 inch wide. Patient died of sepsis. K. explained that the fragments, which constituted almost the entire chimney, must have passed into the bladder in toto, and then broken, as it would have been

impossible for all the fragments to reach the bladder through a distance of nearly 3 inches.—*Centralblatt f. Chir.*, *'90, No. 6.*

ARISTOL, THE NEW ANTISEPTIC.—The *Therapeutische Monatshefte* gives an account of Eichhoff's experiment with this remedy, which is a substitution compound of thymol in which the radical O H is replaced by O I (iodoxyl). The chemical name for the new substance is " dithymoliodide," the proportion of iodine being 45.8 per cent. It is a light, reddish brown, soft, inodorous powder, insoluble in water and glycerin, little so in alcohol, very soluble in ether. It is also soluble in " fat " oils; this solution is to be made in the cold, as heat will decompose the salt. Light also has a deleterious effect on it.

Eichhoff used it in ten cases of superficial sores, and summarizes as follows:

1. Aristol is innocuous in all cases; it possesses no toxic properties and combines with its harmlessness another advantage, viz.: Absence of all odor.

2. It disappointed in only one case, being inferior to iodoform in ulcus molle.

3. In psoriasis it acted a little slower than the sovereign remedies, chrysarobin, pyrogallic acid, etc., but has the advantage of not being toxic and producing no disagreeable or dangerous after effects.

4. In mycoses aristol acts as well as other agents, in fact better, not being irritating.

5. In ulcer of the leg and tertiary syphilitic ulcerations it acts more rapidly than any other remedy.

6. In lupus it surpasses all other remedies, even the best ones, in energy of action as well as its perfect harmlessness.

The success in one case of lupus was simply surprising, possessing, according to E., not only the properties of a specific poison for bacillus tuberculosis, but at the same time stimulating the surfaces to exuberant granulation.

Eichhoff recommends that the remedy be tried in surgical joint and bone diseases, in gynecology, and as a hypodermic injection in form of oily solution for general and local tuberculosis and constitutional syphilis.

Compression of the Brain and Spinal Cord.—By Dr. Adamkiewicz, Vienna.—Formerly it was assumed as an axiom that brain-tissue was practically incompressible, and the symptoms caused by increase of the intracranial pressure were supposed to be due to cerebral anæmia. Experiments on animals, however, prove that these suppositions are wrong. For the volume of the brain can be diminished by pressure, and this diminution is not due to narrowing of the blood vessels, but to the displacement of fluid from the cerebral tissue into the subarachnoid space, and thence into the cord and the lymphatics and veins of the neck. When the pressure is below a certain limit, but yet sufficient to materially lessen the bulk of the brain, the cerebral blood-vessels actually dilate. The dilated vessels supply sufficient nutriment to the compressed tissue, and there is no functional disorder of the parts of the brain involved. When the pressure is below the limit at which functional disorders appear, our author considers the compression to be of the first degree. In compression of the third degree there are visible breaches of continuity; in other words, the brain is crushed or bruised. Between compression, which causes no functional disorders, and compression which produces structural lesions, lies compression of the second degree, in which the damage done to the tissues is said to be molecular or dynamical, because it cannot be detected by the microscope. While compression of the second degree lasts, there are pronounced functional disorders, but complete functional restitution follows on the removal of the compressing force.—*Gaillard's Medical Journal.*

Operative Versus Therapeutic Treatment of Strumous Glands.—Mr. Bertram Thornton read a paper on this subject before the West London Medico-Chirurgical Society. He alluded to the records of the last fifty years at the Royal Sea Bathing Infirmary, Margate, which testified to the unsatisfactory and tedious methods of treatment prevailing up to within the last few years. Having reviewed the various modes of treatment of enlarged glands in their different stages, such as erasion, by poultice, iodine painting, mercurial ointment, calcium sulphide, etc., injection of various drugs and

applications of strong caustics, he pointed out that whatever action these methods had on the diseased glands, the process was very tedious and uncertain, and the resulting scars most unsightly. An operative experience of about a hundred cases of various degrees of magnitude led him to urge the excision of *every enlarged gland* or part of a gland after a reasonable period—say six or eight months—of constitutional treatment and change of air at the seaside. Modified operations, such as scooping, aspiration, small punctures with drainage were nearly always unsatisfactory, as diseased gland tissue was left behind. Hitherto, he had fortunately had no death or serious complication to record, and the vast majority of cases had healed rapidly. He claimed for the method of excision that many months of tedious treatment were saved, the resulting scars were less unsightly, and that the operation if performed with skill and care and in good hygienic surroundings was usually satisfactory.—*Med. Press and Circular.*

A NEW MEDICAL DICTIONARY. By Geo. M. Gould, B.A., M.D. P. Blakiston, Son & Co., Philadelphia.

The author states in the preface that the work has been shaped to meet the following purposes:

1. To include those new words and phrases created during the past ten years, and which appeared destined to continuous usage.

2. To frame all definitions by the direct aid of new, standard and authoritative text books, instead of making a patch-work of mechanical copyings from older vocabularies.

3. To omit obsolete words not pertinent to medicine, except in a remote or fictitious sense, while neglecting nothing of positive value.

4. To make a volume that will answer the needs of the medical student and busy practitioner, by its compactness, and logicalness of arrangement, its conciseness of definitions, its elimination of the useless, and its convenience of size and price.

Blakiston, Son & Co. are to be complimented on the neatness of the work throughout.

SPINAL CONCUSSION. By S. V. Clevengen, M. D. F. A. Davis, Philadelphia, publisher.

"That the spinal sympathetic nervous system is the main seat of the disease, and that in consequence the cord func-

tions are deranged, accounts in the author's opinion, for much, if not all, that has been hitherto unexplainable.

"These views are original and were not heretofore advanced, for they are based upon quite recently discovered symptomatology and an exclusion of previous errors in diagnosis, which would not until this time have enabled any such conclusions to have been reached."

DEPARTMENT OF

GYNECOLOGY.

EDITED BY

T. J. CROFFORD, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

A FEW POINTS IN THE TREATMENT OF ENDOMETRITIS

Read before the Mississippi State Medical Association, April 17, 1890,

BY T. J. CROFFORD, M.D., OF MEMPHIS, TENN.

PERIUTERINE INFLAMMATION.

There is no question but there is a closer relationship existing between periuterine and intrauterine inflammation than has formerly been supposed. An endometritis is not likely to continue long without giving rise to periuterine disturbance, and periuterine disease is quite prone to produce uterine or intrauterine disease. We now, with the light shed upon the subject by modern pathology, can readily appreciate the change in the nutrition of the organ by an inflammation in the tissue in proximity to it. It is as irrational to prescribe for an endometritis without taking into consideration the periuterine tissues, as it is to treat a malposition of the womb without regard to the condition of the adnexa.

In relation to the multipara and to childbearing we speak of the great parturient cycle of reproduction, and divide this into the ascending and descending phases; the chronic metritis is due to an arrest in the descending phase (subinvolution). So also menstruation is divided into the ascending

and descending phases of the cycle, and enlargement of the womb in the non-parous is due to an arrest in the descending phase, and may not improperly be called menstrual subinvolution. The aim of treatment should be to destroy this excess of tissue, and all successful treatments when studied will be found to have this effect.

The primary effect of a caustic application to the inside of the uterus is, as observed 1st, a sharp pain of a colicky character, and 2d, compression of the blood vessels, as indicated by pallor of the vaginal portion of this organ. These primary reflex symptoms, however, are not to be expected where the organ has been slowly dilated by means of tents or where œdema is present.

During several hours after the application corresponding to the time at which the patient experiences a weighty, burning or bearing down feeling in the hypogastrium, there is an active afflux of blood not only to the submucous parenchyma of the uterus, but to the periuterine tissue as well. This hyperemia is largely vasoparalytic, secondary to the transitory reflex contraction of the blood vessels in consequence of an irritament to the endometrium.

In thirty-six or forty-eight hours from the time of the application, membraniform shreds, the eschar formed by the caustic, are thrown off. The feeling of soreness now usually gives way, nervous reflexes and leucorrhœa are now to a marked extent diminished, and the next menstruation is usually attended with much less pain.

Then comes the question, how can these immediate results modify metritis? One way in which it modifies the disease is by an actual destruction of the diseased tissue. There is not a great deal of difference between curetting and a thorough cauterization of the diseased interior. Martin of Berlin, and more recently in this country, Engleman of St. Louis, have recommended curetting in just this condition, instead of using the caustic.

Then too, the excitement produced by the application tends not only to promote contraction of the uterine fibers, and aids in restoring the normal tonicity of the organ, but tends to produce an *increased arterialization of the pelvic tissues.*

The dead tissue acts as a foreign body whose irritation dilates the blood vessels in immediate proximity, injuring them, so as to cause the escape of leucocytes, and not only this but a free escape of serum mixed with blood. In this way depletion extends beyond the limit of the eschar, a disengorgement is produced, and an artificial involution is brought about. It is also claimed that this not only stimulates the muscular fibers into activity by the primary reflex influence and secondary improved nutritive changes, but in addition the subinvoluted endometrium has become excessively vascular. At menstruation this tends to occlude the internal os, while at the same time the nervous excitement of the endometrium is increased, so that the retained flow will further tend to promote a normal and healthy action of the muscular fibers. Thus it is evident how this, together with increased supply of arterial blood, will effect a more complete menstrual involution, and by this means further remove the cause upon which the metritis depends.

Intrauterine cauterization, like other irritating applications, always produces a dilatation of the blood vessels which corresponds to the zone of peri-inflammatory hyperemia surrounding every focus of inflammation.

In these distant vascular effects lie the principal power, and is dangerous in proportion to the degree to which periuterine hyperemia pre-existed. Proximity to a menstrual period, chronic peritonitis, ovaritis or salpingitis, or an intense degree of engorgement of the periuterine reservoirs and ovarian bulb, even without exudation, all these give hyperemia, and to this extent render intrauterine medication dangerous.

The application should be decidedly caustic. Nitric acid is applicable where the uterus is large and flabby, indolent, with dilated canal, thickened endometrium, and profuse catarrh, and contra-indicated where the uterus is closed, tense and irritable. Iodine or iodinized phenol is required when it is desired to make a remote impression upon the parenchymatous circulation of the uterus. Carbolic acid is required when a slight effect and a local anesthetic influence is desired. Perhaps I use nitric acid C. P. more frequent than all other

caustics combined. I am in the habit of wrapping a small applicator closely with a very small quantity of absorbent cotton, then dip this into the acid, and after shaking off all that can be in this way displaced, thrust it quickly through a sufficiently dilated cervix into the inside of the organ.

Physicians have hitherto considered the contractile force of the uterus in its relation to parturition. The force of this muscle can be made a powerful ally in combating chronic inflammation of the uterine parenchyma if we will only stimulate it into activity. Everyone who practices gynecology should appreciate the fact *that a healthy tonicity of the muscular fibers of the womb is almost indispensable to a cure of an inflammation of its walls or lining membrane.* Doubtless it is through the muscle that electricity is of value.

STENOSIS.

Not a few cases of chronic endometritis which ultimately involve the tubes, ovaries and pelvic peritoneum, have their origin in cervical stenosis, and many cases of Tait's operation can be averted by a treatment which will keep patulous the neck of the womb.

Fifteen months ago Mrs. W., aged thirty years, consulted me on account of pelvic uneasiness, and especially great suffering at the time of her menstrual periods. An examination showed an enlarged cervix with a very small opening. The womb had been poorly drained for quite a while. She also had ovarian enlargement to near the size of a goose egg. We operated, excising, thoroughly dilating the cervix and keeping it open for a few months. The result has been a complete cure of all the symptoms. Her menstrual periods are absolutely painless and her general health faultless, although the ovarian enlargement, as a matter of course, is not materially benefited. This was just such a case as is usually selected for Tait's operation. Is it unreasonable to conclude that many cases of diseased tubes and ovaries can be kept at bay? Is it not a fact that once upon a time many of these cases were tided along somehow without removal? The reaction has certainly set in, but let us not be oblivious of the fact that there is a place in surgery for Tait's operation, and much

lasting good has already been done and more will be done in the future by its employment in well-selected cases.

DILATATION.

When the cause of inflammation is due to stenosis of course we can do no permanent good without a dilatation of the cervix. Then the question arises, shall we perform gradual or rapid dilatation? I am decidedly in favor of the rapid operation. I do not believe we are justified in using the sponge or kindred tent. Aside from early becoming septic by the absorption of secretions and by means of the pressure forcing these again into the system after they have become septic by the normal warmth of the body, these tents by blocking up the canal cause an accumulation in the cavity of the organ which may bring on uterine contraction, the fluid unable to escape below is forced out through the fallopian tubes and at once sets up pelvic peritonitis. By observing cleanliness by means of irrigation with sterilized water during and after the use of the steel dilator, I regard the latter in cautious hands as safe as any operation can be—so often have I as well as others resorted to it, thoroughly dilating the most stubborn cervices with practically no symptoms following.

The swaying of the pendulum of professional opinion is perhaps nowhere better shown than in the operations of Sims and Emmet. Two decades ago the craze was slitting the neck. Then Emmet instituted the operation of repairing slit or torn cervices, and the profession swung his way. The reaction has set in again, and many of our leading writers are realizing that we have been led too far* and are turning to the real position of Sims, who not only realized the mechanical obstructions to the ingress of the seminal fluid into the uterus as a cause of sterility, but was also fully acquainted with the fact that disease and sterility would follow on account of a failure in the egress of the fluids from the uterine cavity. For he says, "The mechanical obstruction at the os preventing the flow, causes a partial retention of the secre-

* Mr. Lawson Tait in his new work just published claims that there is no place in surgery for Emmet's operation upon the cervix. Few American gynecologists will agree with him in this. It is usually the abuse of a good thing that brings it into disrepute.

tions, which thereby undergo some change that reacts upon the tissues and produces a sort of subacute endometritis."

DISPLACEMENTS.

Probably no subject within the domain of gynecology has elicited keener controversy than the etiology of displacement of the uterus. Few will acknowledge that they have not settled views about it, and yet when pressed they will define themselves very vaguely. Accurate investigations are scarce, and the results indefinite. Even frozen sections rarely agree with each other.

The womb, in health, is a very mobile organ, being delicately poised in the pelvis. It is pressed downward by a distended stomach or a deep inspiration. It is thrown forward by a loaded rectum, or backward by a distended bladder. The line of demarcation between a physiological and a pathological position is by no means clear, since the organ will, by the resiliency of its support, astonishingly be corrected when the cause giving the offense is removed. The uterus is passive. These displacements are physiological, so far as the uterus is concerned, until there is a giving way of some of the supports, or a change in the nutrition of the organ, giving rise to increased weight, which further adds to the difficulty. The question arises, are these malpositions primary or secondary? Are they diseases *per se*, or are they the result of disease which pre-existed and caused the displacement? I cannot conceive of a malposition which did not have some pathological antecedent. This view diminishes the importance of displacements in themselves, and increases that of the pathological condition giving rise to them. This view is more in accord with the facts, but hyperplasia or subinvolution are always increased by malposition, or even produced by the changes in the nutrition of the organ, brought about by the interrupted nerve and blood supply incident to a displacement. Whatever may have been the cause of the displacement, we know by experience that the innervation and circulation is carried on more in accordance with a healthy nutrition of the organ when in place, than when out of place. It frequently happens in practice that it is necessary to restore

the organ by a method that will hold it to its proper position in order to obtain the fullest effect of other measures of treatment.

THE CURETTE

has for some time been extolled when a fungous degeneration of the lining membrane of the womb existed, but of late its use has been extended to almost all cases of inflammation, and it seems especially adapted to those cases where the disease has progressed till hypertrophy or menstrual subinvolution has taken place. When I say curette, I mean the sharp instrument. I have seen but few instruments of less value than the dull curette. That the sharp instrument is capable of doing great harm in reckless hands I admit, but the most valuable things in life are the most easily abused. It not only destroys the diseased tissue, but causes contraction of muscular fibres, and in this way has a similar effect to intrauterine caustic applications, and perhaps will leave less cicatricial tissue.

CORRECTION OF DISPLACEMENTS.

There should be no suprapubic operation undertaken until the inferior supports have been restored, in case they have given way; this will in the majority of cases suffice. Among the suprapubic are: sewing the fundus uteri to the abdominal wall (Thomas' operation); sewing the cornua to the abdominal wall (Sanger-Kelly operation); reefing the upper portions of the broad ligament, including the round ligament (Tait's operation); reefing the outer border of the broad ligament, excluding the round ligament (Imlach's operation); folding the round ligament (Wylie's operation); uniting the round ligaments in front of the uterus (Polk's operation). These have a limited field. Some of them are only intended as supplemental to a laparotomy, as they can only be done when the abdomen is open. The method of stitching the fundus uteri to the anterior wall, without opening the abdomen, strikes me as the most valuable. In the great majority of cases it is greatly superior to Alexander's, on account of the difficulty of performance of the latter, the frequent exposure of the peritoneum on account of an abnormality in the insertion of the ligaments.

The method I am about to describe, will, in the majority of cases, suffice. After etherization take a seat upon a low chair, then have the buttocks of the patient drawn down to the edge of the table, so as to give you a great obliquity of the pelvis; when the legs of your patient have been brought down on either side of you, introduce three fingers of your left hand well up into Douglas' cul de sac and use force sufficient to make the fundus bulge above the symphysis pubis, then, by the help of your assistant, push the small intestines up above, and after another assistant empties the bladder by means of a catheter, then with the largest size curved Haggadorn needle, threaded double with 26 silver-wire, make a swoop in and out, picking up the fundus. These may be fastened over a porcelain button and allowed to remain two weeks, when the fundus will be found in the position in which it was left. Of course antisepsis or rigid cleanliness must be observed. Then there is no danger. My own theory is that this is due to the change in the nutrition of the organ, and the adhesions in reality play a small part in the advantage derived. This operation is generally supplementary to curetting, repairing a torn cervix, etc. Any means by which you will keep the womb in position while the rapid involution is taking place, in my judgment, will need no adhesions to keep it there, provided there be no retrotraction made upon it on account of peritoneal contractions, contortions, or shortening of the posterior ligaments.

Mrs. C. of Arkansas, aged 22 years, was examined by me in August, 1889. She had given birth to a child two years previously. The cervix was torn, the womb enlarged and very much retroverted. There was great pelvic tenderness and a drenching flow at each period. The pain in her back was continuous and distressing. After a rather protracted treatment locally and by means of tonics her condition was improved. I curetted thoroughly, repaired the torn cervix, and sutured the fundus to the anterior abdominal wall as above described. She has been continuously improving; the pain in her back has never returned. I had the privilege of examining her three days ago and found her in all respects well. This case had been treated by an eminent specialist after the established methods of the day.

DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

EDITED BY

JAMES L. MINOR, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

BLINDNESS.*

FRANK TRESTER SMITH, A.M., M.D., CHATTANOOGA.

Formerly Asst. Surgeon New York Ophthalmic and Aural Institute, N. Y.

The object of this paper is to call the attention of the members of this society to this subject, and especially in reference to its prevention.

In a paper read before the American Ophthalmological Society, Dr. Lucien Howe of Buffalo, N. Y., called attention to the fact that while the population of this country increased 30 per cent. in the decade from 1870 to 1880, the number of blind, as shown by the census, increased over 140 per cent. In the Reference Hand-book of the Medical Sciences, Dr. J. L. Minor attributes this increase:

1. To more complete census returns.
2. To injuries received during the war, swelling the ranks of those simulating blindness for the purpose of getting a pension.
3. To increase of foreign element.
4. To increase of manufacturing.
5. To increase of those employments which produce changes in the nervous system through bodily and mental strain, in which changes the eyes participate.

In 1880, there were nearly 50,000 blind in the United States. The cost of maintaining this great army was almost six and a half million dollars. This amount added to what these persons would earn at ordinary labor, would make the annual cost over sixteen million dollars. Carefully prepared statis-

* Read before the Tennessee State Medical Society, Memphis, 1890.

tics by various writers show that about 50 per cent. of the cases are preventible, and herein lies the interest to us as medical men.

One disease stands out pre-eminently as a cause of blindness, *ophthalmia neonatorum*. In asylums for the blind, from 10 to 25 per cent. have been brought there by this disease. This is almost entirely preventible.

At the last meeting of the Medical Society of New York, a committee appointed for that purpose, reported that from 20 to 50 per cent. of the blind in the various institutions in the State were caused by contagious diseases. In view of which fact, they recommended:

1. To popularize with the profession and the laity the necessity of great care in the cleansing of infants' eyes immediately after birth, and if possible, to apply a suitable solution of nitrate of silver which need never be stronger than two per cent. (gr. x ad ℥j).

2. Enactments by the Legislature should be encouraged in regard to proper isolation and quarantining of all persons with suspicious diseases of the eyes, in institutions where large numbers are brought together.

3. The laity should be cautioned as to the contagious character, not only of the so-called granular lids, but especially of those severe forms of inflammation which result from inoculating the eye with gonorrhœal matter.

4. That steps be taken to prevent the introduction into this country, by immigration, of cases of contagious diseases of the eye.

5. That the profession renew their efforts to collect data relating to the bacteria affecting the eye.

In London there is a society for the prevention of blindness. In Holland and other European countries, a circular is given the person who registers a birth, giving directions as to the care of infants' eyes, and directing that in case there is inflammation with a discharge, that a physician be called at once. It will thus be seen that in other communities this subject is attracting attention, and if this paper can arouse your interest in the matter, its object will be accomplished.

Crede, by the use of a solution of nitrate of silver (gr. x ad ℥j) reduced the number of cases of ophthalmia neonatorum from 10 per cent. to almost nothing.

Knapp says that after the disease has developed, every eye can be saved by timely treatment. What this treatment is, has been ably discussed in papers published in the transactions of this society in 1887 by Dr. Masters, and in 1889 by Dr. J. G. Sinclair, and at this meeting Dr. Minor will present a paper on the subject.

The treatment I usually adopt differs somewhat in the greater reliance on cold applications, and the avoidance of strong applications of nitrate of silver, rarely using more than 10 grains to the ounce.

Cold applications are made in this way: About a dozen pieces of white cloth (preferably old linen) are cut two inches square. These are folded twice, making four thicknesses for each piece. They are placed on a piece of ice and placed alternately on the closed lids. They are changed every half minute or before they begin to get warm. Thus a continuous cold application is made. An intermittent application would defeat the object. In severe cases the applications are kept up night and day, requiring at least two nurses. In milder cases, they are kept on half an hour to an hour, three or four times a day, according to the amount of swelling and the severity of the inflammation.

But the efficacy of Crede's method should be insisted upon. The ease with which it can be practiced, the slight inconvenience to all concerned, and the certainty of its results, all recommend its general adoption by obstetricians.

Another disease that causes its share of blindness, is so-called granular lids. Its diagnosis and treatment should be understood by the general practitioner. Bluestone is the sheet anchor, silver and tannin are valuable adjuvants, while lead and alum would better not be used.

Jequirity might also be mentioned as a cause of blindness, but tell it not in Gath that in the hands of enthusiastic members of the profession, it has produced its quota of blind.

Glaucoma is generally amenable to treatment if the diagnosis is made sufficiently early, and for this reason every

physician should know enough of the disease to make the diagnosis in well-marked cases. The most marked sign is the increased tension (hardness) of the eyeball, which is easily detected in well-marked cases by pressing the ball with the fingers and comparing the resistance with the fellow eye or with that of another person. This will not be elicited unless looked for. The presence of pain in the eye, especially if there be a dilated pupil, should cause us to examine the tension. It is not at all an unknown thing that in cases of this nature, cataract has been diagnosed and the patient is directed to wait until it is ripe before visiting an oculist, with the result that the eye is hopelessly blind. I have thus called your attention to three diseases which are of most importance in the production of blindness. This does not exhaust the list by any means, but lest I exhaust your patience, I will desist. It is perhaps too much to hope that our Legislature would pass such laws as have been recommended by the committee of the New York State Medical Society, but the profession can do much to lessen the number of these unfortunates. One other point, and I am done. There are many of these cases in the State that could be benefited by an operation. As long as there is any clear cornea, and the patient has perception of light, he should have the benefit of an expert examination.

The usefulness of good Hypophosphites in pulmonary and strumous affections is generally agreed upon by the profession. We commend to the notice of our readers the advertisement of R. A. Robinson & Co., in this number. Robinson's Hypophosphites is an elegant and uniformly active preparation; the presence in it of quinine, strychnine, iron, etc., adding highly to its tonic value.

ORKNEY SPRINGS, VA.—We would call the attention of the profession to the advertisement of this reliable health resort, and specially commend the place for the malaria-ladened inhabitants of the Mississippi bottom. Having spent some time there, the advice is personal.

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Original articles and clinical reports solicited. Contributors are notified that all matter forwarded us, is received with the distinct understanding that said matter has never appeared in print, and will not be allowed to appear in any other journal prior to its publication in this. All such matter should be sent directly to the editor to whose department it pertains.

Secretaries of medical and surgical societies will favor us by sending dates of regular meetings, with brief programme of important subjects coming before the meeting.

All matter must be in our hands on the tenth-of the month preceding its publication.

The JOURNAL will be issued on the fifth of each month.

All communications other than provided for above, should be addressed to

JAS. L. MINOR, M.D., Editor,
Memphis, Tenn.

THE WATER SUPPLY OF MEMPHIS.—Dr. J. M. Safford, in the February number of the State Board of Health *Bulletin*, has an interesting and instructive article on the water supply of Memphis. As the pure artesian water, upon which Memphis now depends for her water supply, has been an important factor in the diminished death rate and increased healthfulness of the city, it is gratifying to know that the supply can be neither contaminated nor exhausted, and interesting to learn the details of procuring it, as is shown by the following brief synopsis of Dr. Safford's article. The history of the subject is thus succinctly stated: "From well and cistern to Wolf river, from Wolf river to artesian water."

The reservoir from which the water is supplied is a layer of water-bearing sand about 800 feet in thickness, sandwiched between two immense basins of impervious clay, the upper of which is about 145 feet thick, with its rim or outcropping 50 miles or more from Memphis, while the lower is about 45 feet in thickness, and has its rim or outcropping 70 miles or more from the city. Between these outcrops or rims of the clay basins is found the water-bearing sand, occupying an area 20 miles across and indefinite in length, "a very great

area upon which the rains of heaven fall freely, and in which wholesome springs abound, rivers flow, and smaller streams have their headwaters." Water falling over this area, which is about 250 feet above the level of Memphis, sinks into the sand, and filters for 50 miles or more through this porous stratum, to accumulate in the immense clay basin underneath the city. The upper basin, or layer of impervious clay, which acts as a cover and holds the waters down, has simply to be pierced when the artesian water rises at once to a height 7 feet above the high-water mark of the river at Memphis, that being the limit of rise of water in the wells, which is constant. Superimposed upon the upper stratum of impervious clay are two other layers—one of gravel, lying next the clay, which is about 20 feet in thickness, and another, of bluff loam or loess, about 25 feet thick, which constitutes the surface upon which the city is built. The tube of the well, which is made of steel, with a lumen of 8 inches, passes through the following strata: Loam, 25 feet; gravel, 20 feet; impervious clay, 145 feet, and penetrates the water-bearing sand to a depth of 290 feet, the total depth being 480 feet. The lower end of the tube is capped with a perfected strainer, which prevents the entrance of sand into the tube. Such a well furnishes 100 gallons of water per minute, and, as there are 32 wells, the supply is 4,608,000 gallons per day. In estimating the amount of water necessary for a city's supply, 20 gallons per head of population is taken as a liberal quantity for domestic and general requirements. With this ratio, the present water supply of Memphis is sufficient for a city of 230,000 inhabitants.

To provide a common conduit to gather the water from the scattered wells and convey it in ample volume to the pumps, a tunnel was constructed, into which the artesian wells empty their supply. This tunnel, built of brick and cement, circular in cross section, with an internal diameter of 5 feet, and a length of 3000 feet, lies altogether in the layer of impervious clay, 76 feet below the upper limit of artesian flow; hence, the water from the wells flows into and fills the tunnel with considerable pressure and volume, and is pumped therefrom throughout the city.

A standpipe, 20 feet in diameter, rising 160 feet above its base and 219 feet above the highest level of artesian overflow, with a capacity of 400,000 gallons of water, is connected with the city mains and serves as a safety valve. The water is clear and sparkling, pleasant to the taste, and has a temperature of 62° F., which it maintains the year round. It shows no trace of sewage, and is thoroughly secured against pollution by the impervious stratum of clay above it, and the thorough filtration which it undergoes in passing 50 miles or more through the sand to reach the depths under the city.

"I know of no city which has a water supply as pure as the samples now reported on," says Dr. Chas. Smart, a distinguished chemist of the U. S. Army; and the standard of purity then given has been fully demonstrated from a health standpoint, and still maintains.

This will be a lasting monument to the energy and zeal of Mr. R. C. Graves of Memphis, to whom the city is indebted for this inestimable boon.

AMERICAN MEDICAL ASSOCIATION.—The forty-first annual session will be held in Nashville, Tenn., on Tuesday, Wednesday, Thursday and Friday, May 20, 21, 22 and 23, commencing on Tuesday at 11 A. M. Delegates must receive their appointment from permanently organized State Medical Societies, and such County and District Medical Societies *as are recognized by representation in their respective State societies*, and from the Medical Department of the Army and Navy, and the Marine Hospital Service of the United States.

Each State, County and District Medical Society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number, *provided*, however, that the number of delegates for any particular State, territory, county, city or town shall not exceed the ratio of one in ten for the resident physicians who may have signed the Code of Ethics of the Association.

Members by Application.—Members by application consist of members of the State, County and District Medical Socie-

ties entitled to representation in this Association who make application to the Treasurer and accompany the application with a certificate of good standing signed by the President and Secretary of the society of which they are members, and the amount of the annual membership fee, $5. They shall have their names upon the roll and have all the rights and privileges accorded to *permanent members*, and shall retain their membership upon the same terms.

Reduction in return railroad fare will be granted holders of certificates of purchase of first-class tickets from agents at starting points when countersigned by the Secretary of the Association.

THE EIGHTH VOLUME OF THE INTERNATIONAL ANNUAL is before us. This work has been compiled from brief and concise articles and reviews by an able and extensive corps of contributors, who have gleaned the medical literature of the world, and presented an epitome of its progress for the past year. Such a work is an outcome and a necessity of this age of investigation and progress, for the busy practitioner can find time to read and digest but a small proportion of the deserving articles which appear during the year, when the journals are at hand, and but few have access to a large number. This book fills that want, for it represents the crystallized progress of medicine for the year, and the busiest physician may inform himself of its advances by consulting its pages. It would be a work of supererogation to dwell upon any special subject discussed, but we cannot but commend the merited prominence given thermo- and electro-therapeutics, and the science of sanitation. This book is well prepared, presents an attractive appearance, is fully illustrated, and covers 600 pages. It is published by E. B. Treat & Co., 5 Cooper Union, N. Y. Price, $2.75, and we know of no better investment.

THE TENNESSEE STATE MEDICAL SOCIETY held its fifty-seventh annual meeting in Memphis on the 8th and 9th of April. The meeting was well attended, the articles were numerous and well selected, and the discussions animated and instructive.

The report of the State Board of Medical Examiners, presented by Dr. Happel, the Secretary, teemed with interesting and important facts, and shows not only the valuable work already accomplished, but furnishes an excellent basis for further medical legislation. The following officers were elected for the ensuing year: President, Dr. G. A. Baxter; Vice-Presidents, Drs. S. W. Sanford, W. G. Ewing and N. T. Dulaney; Secretary, Dr. E. G. Nelson; Treasurer, Dr. J. C. P. Walker. The next meeting of the Society will be held in Nashville.

The Mississippi State Medical Association met in Jackson, April 16th to 18th. The attendance was not so large as usual, and the faces of several well known and active members were missed. The proceedings, however, were interesting and instructive, as they always are. The following officers were elected for the ensuing year: President, Dr. G. W. Trimble; Vice-Presidents, Drs. J. Y. Murray and R. W. Rowland; Secretary, Dr. W. E. Todd; Treasurer, Dr. John F. Hunter. Meridian was selected as the next place for the annual meeting.

Beginning with the issue for March, 1890, the *Annals of Gynæcology*, formerly published in Boston, was enlarged and improved, and a department of pædiatry added, under the editorship of Dr. Louis Starr, of Philadelphia. The journal is now published by University of Pennsylvania Press, Philadelphia, under the name, *Annals of Gynæcology and Pædiatry*. Dr. E. W. Cushing, of Boston, continues to edit the Department of Gynæcology.

Mr. E. F. Kloman, the representative of the New York Pharmacal Association, is in the city, with full line of their Lactopeptine preparations, which he is distributing among the physicians, with that grace and confidence which go with a full knowledge of their reliability. They are the best in the market.

Hydroleine.—We would call attention to this valuable preparation, and commend its use in conditions requiring reconstruction and building up. See adv.

READING NOTICES.

SEE the advertisement of the Lilly Carriage Co., who make a specialty of physicians' phaetons and carriages. They are reliable and we commend them highly.

LEIDY & Co., the leading retail hatters of Memphis, 273½ Main street, invite inspection of their new stock of goods, which are of the best.

IF you are in need of furniture or office fixtures consult the Armstrong Furniture Co., who have always on hand a complete and full line of all such goods.

P. M. STANLEY, funeral director and embalmer, has always on hand a complete selection of goods. He is prompt and reliable. His free ambulance is always on hand when needed.

To those needing silk elastic stockings, rubber bandages, fountain syringes, webbing for trusses and other rubber goods used in the profession, we would commend the Goodyear Rubber Co., Turner & Co. proprietors, 245 Main street, Memphis.

THE Gayoso Pharmacy has recently been refitted and enlarged, and is now one of the finest drug stores in the city. The proprietors, T. P. Fortune and R. B. Taliaferro, are thoroughly reliable and accommodating, and their drugs are of the best.

WANTED.—Wholesale druggists to handle our line of Antiseptic Dressings and Pharmaceutical preparations. Correspondence solicited. Send for our new and extended catalogue and discounts which will be mailed free. One trial will convince you of the worth and cheapness of our goods.

LISTER MANUFACTURING CO.,
General Office and Laboratories, Bloomfield, N. J.

Opinions of Prominent Practitioners.

Campho-Phenique in Diseases of Women.

Dr. Walter B. Dorsett, Superintendent Female Hospital, St. Louis, says: As a local germicide, applied to the cervical canal in early cases of gonorrhea, in women, Campho-Phenique prevents endometritis and salpingitis, and when used upon open chancroidal buboes, it promotes early granulation and healing.

Dr. P. P. Price, Professor Clinical Gynecology, Urinary and Rectal Diseases, Eclectic Medical College, Cincinnati, writes: Having used Campho-Phenique with wonderful success in my practice for the past year in the treatment of rectal, vaginal and uterine diseases, I deem it but just to you that I give this expression of my gratitude for the great benefits derived from so valuable a remedy as Campho-Phenique. I regard it as a powerful antiseptic and local anæsthetic.

Dr. Walter Coles, late President St. Louis Obstetrical Society, writes: I am much pleased with Campho-Phenique. Its property of obtunding pain, in conjunction with its antiseptic and local alterative effects, renders it an admirable agent, when applied undiluted, in the treatment of erosions about the os uteri, and chronic ulcers and fissures of the anus. Mixed with vaseline it may be applied as a permanent dressing on absorbent cotton. Diluted with vas-line or lanoline it is an efficient and agreeable application in many skin diseases.

Dr. D. C. Knott, Argos, Ind., writes: Campho-Phenique is superior to any application I have ever used in the treatment of obstinate cases of ulceration of the os uteri; in fact, it is the only agent I have ever found that would cure such cases. Two cases were of two years standing and had resisted the most skillful treatment. Each was healed nicely with Campho-Phenique, and the patients relieved of what had been a loathsome disease.

Campho-Phenique in Surgical Practice.

Dr. W. H. Grason, Surgeon to St. Mark's Railroad Hospital, Venice, Ills., says: I have used Campho-Phenique in all sorts of surgical procedures, and believe it to be the best antiseptic known. I find it non-irritating, non-poisonous and highly germicidal. It corrects offensive odors and facilitates healing. In a word, Campho-Phenique is the only antiseptic agent I am acquainted with that possesses all the good qualities without any of the bad. It is the remedy *par excellence* in erysipelatous affections.

Campho-Phenique in General Practice.

Dr. S. T. Yount, President Indiana State Medical Society, writes: I have given Campho-Phenique a careful and thorough trial in a great variety of cases, and find it better than any known remedy I have heretofore used. I have treated two cases of empyema with the most satisfactory results by the use of your remedy. I can cheerfully endorse it as the best antiseptic, germicide and disinfectant now in the market, and also can recommend it to the general practitioner as the very thing he needs for the various wounds, sores and injuries he may be called upon to treat.

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DEPARTMENT OF

PRACTICE OF MEDICINE & THERAPEUTICS.

EDITED BY

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Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

OUR MEMPHIS MILK SUPPLY.

WM. KRAUSS, M.D., MEMPHIS, TENN.

There is no article of diet the purity of which is of so much importance as that of milk. Other foodstuffs, though subject to adulteration, are rarely given to invalids and never to infants, while it is just they who consume milk almost exclusively, and in whose food supply purity and quality are of first importance. Moreover, milk is an animal secretion, and its quality depends on the health and condition of the animal yielding it. Physicians should acquaint themselves with the quality of milk their patients are using, and with this object in view I made a series of analyses.

The milk supply of large cities necessarily comes from a distance. It requires time to collect and distribute this milk, a circumstance which in itself materially influences its quality. In Memphis most of the milk reaches the consumer by wagon from the dairies in the suburbs. It is collected about twelve to twenty-four hours before it reaches the consumer, and during the time of delivery is exposed to a great extent

to the influence of temperature, atmosphere, and dust. Finally, it may be adulterated before it leaves the dairy.

If we wish to examine the kind of milk most consumers get, it is necessary to choose what we may call "commercial milk," i. e., a milk which is essentially a mixture of products of a number of cows, subject to adulteration, exposure, and the influence of time.

I collected twenty-six specimens of this kind in all; they constitute a fair average of our whole supply. It was purchased directly from the dairy wagon during early delivery hours, and at once placed in clean, sterilized glass bottles.

Method of Examination. An analysis of this kind has no value for statistical and comparative purposes unless the process is known. The literature on the subject shows that a great deal of ingenuity has been wasted on the so-called expeditious, simple, and easy methods. On the other hand, when a large number of analyses are made, and with a view to comparative value, some expedition is necessary. In my preliminary experiments I obtained the most constant results by following the plan given below. The preliminary examination, such as appearance, reaction, pioskop, creamometer, and specific gravity, was made rather to test the value of such examinations, and because they require no time and skill for execution.

1. *Appearance;* deceived me very often; a little excess of coloring matter may cause the milk to look very rich.

2. *Reaction;* was naturally always acid, except one which was alkaline.

3. *Pioskop* (pioscope); consists of a black rubber disc with marginal ring; a few drops of milk are placed upon it and covered by a round glass plate having six radial divisions painted various shades of gray, the center being left transparent. The milk will assume one of the shades of gray (or nearly so) painted on margin, and thus its richness may be read off. A reference to table following will show that it requires quite a difference in proportion of fat to show a different degree, hence intermediate grades were designated by a + or — behind grade of pioscope readings. This is one of the best of preliminary examinations.

4. *Creamometer*, is a glass tube about a foot long, of ½ inch caliber, graduated into 100 parts, and closed at one end; this is filled to 100 with milk and allowed to stand in an upright position for 12 hours, when the per cent. of cream may be read off. The objections to this are 1st, in warm weather the milk will "turn" before separation is complete; 2d, cream is not a definite proportion of fat and casein; 3d, cream rises more slowly in rich milk.

5. *Specific Gravity; per se* reveals absolutely nothing. If a rich milk has a specific gravity of 1.029, skimming it will bring it to about 1.034 (as butter is lighter) and all the intelligent dairyman has to do is to add water to bring it back to 1.029. In table I omitted specific gravity readings; they varied from 1.020 to 1.034. I am surprised to find that some inspectors do nothing but take the specific gravity.

6. *Analysis; total solids* were obtained by evaporating 20 gm. on water bath to constant weight, and result in gms. $\times 5 = \%$; residue is total solids, the difference or loss represents water and gases. *Fat* was extracted with petroleum benzin. *Sugar;* by standardized Fehling's solution, to which potass. ferrocyanide was added, according to Causse;* this increases accuracy wonderfully. *Salts, and casein;* the residue remaining after extraction of fat was ignited in covered crucible, the residue representing the salts (and carbon) or ash. The loss is sugar, casein, albumin, and extractives; the first, having been estimated, is subtracted.

7. *Adulterations.* In looking over a large amount of literature I find that the only adulterant found was water. Insoluble substance would be detected under the microscope, and at bottom of creamometer. Fat could not be mechanically added. Finally, skimming and diluting is the simplest way and answers all purposes. As will be seen in table, the average of total solids did not come up to the standard in the specimens analyzed.

8. *Microscopic Examination.* This is an easy rough means of judging richness, purity, *i. e.*, presence or absence of dirt and insoluble matter. If milk is rich there will be a preponderance of large globules, and vice versa.

* Proc. Am. Phar. Ass., vol. 37, p. 661.

9. *Bacteriological Examination.* As a hygienic procedure it is of more service in examining milk direct from the individual cow than the "commercial" article. In the latter, microbes usually found in the air, and in milk in the stages of change short of curdling, are found. A special examination for tubercle was made, but none found, nor was this likely in "mixed" milk. Bacteriological literature on this subject is very scant. Some exchanges simply mention that milk has been found infectious. Textbooks on bacteriological technology have no special plan to offer. Tubercle cultures are notoriously hard to grow, especially from a fluid full of other microbes. Flügge[1] says: "Occasionally tuberculous animals are the source of infection; but contagion from milk of tuberculous cows seems to take place only where tubercular affection of the milk glands exists." *Per contra*, Bollinger[2] found milk taken from healthy glands of tuberculous cows to be infectious; but when diluted to 1:40—1:100, it no longer affected guinea pigs, and he therefore considers mixed milk from large dairies preferable to that from single animals. Karl Hirschberger (under Bollinger's direction) found milk infectious in 55 per.cent. of tuberculous cows, "even in slight cases of localized tuberculosis." It would thus seem that the physiological test would be the best. Adam Gibson[3] traced an epidemic of typhoid fever in a small town in England to a dairy. On examination of the water supplying it, it was found contaminated with decomposing animal matter. Wm. Brown of Carlisle[4] traced a typhoid epidemic to a dairy in which cows were affected with a febrile disorder. Satisfactory evidence of diphtheria and scarlet fever being traced to dairies also exist. Dairy hygiene will no doubt become a subject of vital importance, if such instances multiply.

The following table gives result of my examinations:

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1 Die Mikroorganismen, p. 219.
2 Munchener Med. Wochenschrift, 1889, No. 43.
3 Druggists' Circular, March, 1889.
4 Brit. Med. Jour., Aug., 1888.

No. of Specimen	Appearance	Reaction	Milk Tester (Pioskop.)	Creamometer (per cent. Cream)	Constituents in 100.00 Parts by Weight						Microscopical	
					Volatile portion, (water and gases)	Total Solids	Fat (Butter)	Carbohydrate (Milk-Sugar)	Casein, Albumin and extractives	Salts (Ash)	Appearance of Milk	Bacteriological Examination
1	Rich	ac.	Normal	15	88.00	12.00	4.80	3.40	4.15	.65	Very fat	
2	Poor	ac.	Less fat	10	90.70	9.30	3.20	2.45	3.15	.50	Less fat	Streptococci.
3	Fair	ac.	Normal	12	88.25	11.75	3.75	3.55	4.10	.40	Med. fat.	Diplococcus Ros. and others.
4	Rich	ac.	Normal +	16	87.60	12.40	5.15	3.35	3.50	.35	Fat	Unclassified.
5	Fair	alk.	Normal +	13	85.95	14.05	4.65	4.20	4.25	.90	Med. fat	Unclassified.
6	Rich	ac.	Normal +	10	87.35	12.65	3.60	4.10	4.23	.82	Medium	Unclassified
7	Fair	ac.	Normal	10	87.55	12.45	3.15	4.30	4.20	.60	Medium	Unclassified.
8	Ordinary	ac.	Less fat	11	86.60	13.40	4.00	4.40	3.15	.95	Less fat	Unclassified.
9	Fair	ac.	Normal	10	88.15	11.85	3.40	3.85	4.20	.40	Medium	Diplococci and Staphylococci.
10	Fair	ac.	Normal +	10	87 35	12.65	3.70	3.90	4.10	.95	Medium	
11	Rich	ac.	Normal +	13	85.55	14.45	5.20	4.45	4.25	.70	Fat	
12	Fair	v.ac	Less fat	11	86.05	13.95	4.25	4.30	4.55	.90	Medium	Zoogloea.
13	Very rich	ac.	Normal	15	85.85	14.15	5.10	4.07	4.15	.83	Very fat	
14	Rich	ac.	Normal +	16	84.35	15.65	6.05	4.95	4.25	.45	Very fat	
15	Poor	ac.	Less fat—	8	90.25	9.75	2.45	3.30	3.55	.35	Less fat	Dip. Roseus.
16	Ordinary	ac.	Less fat	8.5	88.55	11.45	3.70	3.80	3.55	.40	Less fat	
17	Ordinary	s.ac.	Less fat	11	89.40	10.60	3.10	3.25	3.60	.65	Less fat	Dip. and Staphyl.
18	Ordinary	s.ac.	Poor	8	90.70	9.30	2.55	3.54	2.25	.95	Less fat	Oidium Albic.
19	Fair	ac.	Normal	10.5	89.05	10.95	3.15	4.04	3.02	.72	Less fat	
20	Fair	s.ac.	Normal	13	88.45	11.55	3.55	3.78	3.20	.90	Medium	Staphylococci, Bac. ac. Lactic
21	Fair	s.ac.	Less fat	10	88.40	11.60	3.35	2.80	4.50	.92	Medium	[Diploc.
22	Very rich	ac.	Very rich—	20	85.35	14.65	5.45	4.18	4.05	.95	Very fat	Oidium Albic.
23	Fair	s.ac	Normal	8.5	88.60	11.40	3 25	3.97	3.21	.97	Less fat	Tetrageni.
24	Fair	s.ac.	Normal	7.5	87.35	12.65	2.70	4.15	5.18	.62	Medium	Staphyloc.
25	Rich	ac.	Less fat	11	89.75	10.25	3.07	3.17	3.14	.87	Less fat	Diploc. Roseus, Bac. ac. Lact.
26	Very rich	s.ac.	Normal +	25	88.20	11.80	3.90	2.85	4.48	.67	Very fat	Diplococci.
Highest of each			Very rich—	25	90.70	15.65	6.05	4.95	5.18	.97		
Lowest of each.....			Poor	7.5	84.35	9.30	2.45	2.45	2.25	.35		
Average constituents,						12.16	3.85	3.78	3.84	.70		

The question now comes up: What is the standard of normal milk? Authorities differ, and below I give a table of such as were accessible to me:

Name	Literature	Water	Total Solids	Fat	Other Solids	Sugar	Casein & Alb.	Salts
Foster	Physiology	85.70	14.29	4.30	.....	4.03	5.39	.54
Brubaker	Physiology	89.00	11.0	2.5	.....	4.8	3.5	.2
C.A.Cameron	Chem. News, Feb. 5, 1875..	87.00	13.00	4.00	.....	4.20	4.10	.....
Simon	Manual of Chemistry	86.95	13.05	3.65	.....	4.25	4.40	.75
Lehmann	Phys. Chemistry	87.0	13.0	4.0	.....	4.2	4.1	.7
France	A.J.Lynch, Pr.A.P.A.No.37	.....	.....	2 70	8.80	.....	.....	.....
England	" "	.....	.....	2.50	9.	.....	.....	.....
New York	" "	.....	.....	3.	9.	.....	.....	.....
Massachus'tts	" "	.....	.....	3.65	9.35	.....	.....	.....
New Jersey	" "	.....	.....	3.	9.	...	.....	.....
Average		.....	12.43	3.36	.....	4.3	4.3	.....
A. J. Lynch	Mean of 8 analyses	.....	.....	3.64	10.13	.....	.....	.....

Lynch analyzed Philadelphia dairy milk, one being from an Alderney cow yielding 5.21 of fat, and 15.60 of other solids. Other unofficial analyses give results similar to those given above. The figures on my table show the average of fat to be rather above that of these figures, and total solids below the average. Thus we see that only 13 out of the 26 came up to the New York standard for total solids, and only 3 below it for fat. No. 26, though containing nearly 4 per cent. fat and 25 per cent. cream, cannot be considered extra good, the other solids being only 8 per cent. and the sp. gr. 1.020.

Dr. T. M. Rotch,[1] in speaking of the value of chemical examination of milk, urges that more analyses be made, and all reliable analyses be published (particularly of mother's milk), in order to enable us to better comprehend the causes of inanition.

Thus, if artificial mother's milk were to be made according to the formula given, results would vary considerably if No. 24 were used in one case, and No. 26 or No. 14 in the other.

The bacteriological examination shows that, next to getting fresh milk direct from the healthy cow, sterilization, at the expense of digestibility and palatability, is the best protection against infection. Where milk is ordered to be taken direct from the cow, the animal's condition of health should be carefully looked into.

Finally, health authorities should make it their duty to regulate and control the supply of milk, and see that no adulterated or infected article reaches the market.

1 Keating; Cyclopedia of Diseases of Children, vol. 1, p. 288.

DEPARTMENT OF

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COMPOUND COMPLICATED FRACTURE OF HUMERUS. REPORT OF CASE.

R. W. NOBLE, M.D., BARCLAY, TEXAS.

While fractures, either simple or complicated, are by no means uncommon accidents, I yet trust there are a few points in this case worthy of more than passing thought. To be brief I will copy my notes without further ado.

On August 30 I was called to see Nettie N., æt. 10 years, of Irish extraction. Strumous diathesis. Found the patient lying on the floor, clothing saturated with blood. Blood still oozing from left arm, though five hours had elapsed since accident had happened, which (accident) was occasioned by fall from a horse.

After removing clothing from the limb, I discovered about four inches of bone projecting from a wound above elbow. After cleansing the bone and wound, found the end of a large artery plugged with a clot extending fully an inch up the vessel. Assisted by Dr. Herring the patient was anesthetized and the fracture reduced. The end of the artery just mentioned proved to be the brachial. The fractured end of bone in forcing its way out, pushed aside the biceps muscle, tearing the brachial artery in twain just where it passes under the bicipital fascia, and injuring the median nerve, if not also dividing it. The fracture occurred half an inch above the condyloid epiphysis. The condyles were not dislocated. After reduction the wound was cleansed with carbolized solution (1 in 20), and the arm put in temporary splint. The wound was then dressed with carbolized compresses, to be removed as occasion required and fresh ones applied. The forearm

was cold and insensible to pin thrusts and blue; warm flannels were wrapped around it and directions left to continue same.

I saw the patient on the third day. Some pus was running from the wound. I cleansed the cavity with bi-chlorid. solution 1 : 2000 and put the arm in tin splint, leaving free access to the wound. The arm was swollen above the fracture and very red. A bucket was suspended from the ceiling filled with water, and a rubber tube did the work of a syphon. The water was allowed to flow gently over the arm, and was continued at regular intervals for ten days. The forearm was still pulseless and rather cold and insensible to pin thrusts. No motion was possible in the fingers.

Again on the sixth and eighth day the condition was the same, pus still flowing from the wound.

On the twelfth day, in consultation with Drs. Herring and McDonough, an excision was decided necessary, as dead bone was detected above the fracture. The patient was chloroformed and an incision made on the dorsal aspect of the arm from the olecranon four inches up the arm. The bone was dislocated backward, and four inches of the lower end of the humerus sawed off. The condyles were removed, as they were dead. The arm was then laid on a padded board and water allowed to drip on same constantly. The forearm was still pulseless—no sensation nor motion. Temperature of forearm, about 85°. Directions were left to wash out the cavity twice daily with bichloride solution. The patient's temperature was 102°. Antifebrin, grs. v., was ordered to control any excessive temperature.

Saw the patient on sixth and twelfth day after the operation; was doing well, except that owing to the ill nature of the child and temerity of the mother, the dressings had been neglected and the pus was smelling bad. From this on I saw her every six days until the wound healed.

On the tenth day after the operation sensation was feeble in the forearm, pulse was perceptible and she could move the fingers to a limited extent. I found it nearly impossible to make the mother keep the dressings clean; but notwithstanding the foul condition of the dressings the wound grad-

ually healed, and now she has a good arm. She can put the hand on either shoulder, and to use her expression, "can scratch her back with it."

The point I desire to call attention to, is this: That a continued loss of sensation, absence of pulse and depression of temperature does not necessarily demand an amputation, even when there is presence of dead bone and a suppurating cavity following an injury to a limb. Neither does it follow that a lack of thorough asepsis condemns a wound. Not that I do not deem antiseptics a grand adjunct to surgery, but that a shortage in cleanliness occasionally does not work harm to the individual; for if it did, my patient long ago would have made a requisition for a pair of snowy wings and a "pass" to that bright sphere.

EXCISION OF THE MAMMA, FOR MALIGNANT DISEASE. REPORT OF CASE WITH RAPID RECOVERY.

R. H. PEEL, M.D., HOLLY SPRINGS, MISS.

Assisted by my friend, Dr. Sam Gholson, jr., of this place, I operated upon Case 1—Mary H., age thirty-six years, married, mother of four children, had abscess of the breast four years ago. No hereditary trace of cancer; axillary glands not involved; left breast hypertrophied and pain only felt from jarring the parts and from weight. Constitution good; tumor size of a large orange, hard, smooth surface and quite movable. A second tumor was forming which implicated the entire breast. A cauliflower-like excrescence, about one and a half inches in diameter and raised a half inch above the surrounding surface, encroached upon the nipple which was retracted. A fistulous sinus opened on the under side of gland and discharged ichorous matter, diagnosed malignant. Entire breast removed with a circular incision embracing the affected skin to the extent of five inches across. Ligated external mammary artery and twisted smaller vessels until all oozing subsided; laved the wound with hot water and then with pure campho-phenique; brought the edges together with silk sutures and dressed with campho-phenique and vaseline. Removed dressing on fourth day and found primary

union had been secured in the entire length of cut—8 inches. This woman only remained in bed until the effects of the chloroform passed off, and was able to resume her domestic duties after the 10th day, when the sutures were removed. She says she suffered no pain during nor after the operation, which I attributed to the local anesthetic effect of the campho-phenique. Am I right? I had used this dressing as a germicide with no thought of other effects, but subsequent use of it in fresh-cut, bruised and lacerated wounds, leads me to believe it possesses this property.

PIROGOFF'S AMPUTATION, WITH REPORT OF THREE CASES.*

W. B. ROGERS, M.D., MEMPHIS, TENN.

Chief Surgeon of the Louisville, New Orleans & Texas Railway; Kansas City, Memphis & Birm. R. R.; Div. Surgeon to the K. C. F. S. & M. Ry., Ill. Cent. Ry., and Mo. Pac. Ry.

In presenting this subject with my limited experience I know that I am leading many of my hearers over well-worn ground. The subject has been written and rewritten times innumerable by abler pens than mine. Nor is it my intention to present any new step or modification in the operation. I simply desire to place the subject of Pirogoff's amputation before this assembly for discussion as to its practical value.

I beg leave to report three cases as follows:

Case I. On September 10, 1887, H. N. Leonard, 22 years of age, attempted to board a coach of one of our dummy lines, fell, and the *slowly revolving* wheel of a coach passed across the left foot just in advance of the medio-tarsal articulation, producing a compound crushed fracture of the metatarsal bones as well as the anterior row of tarsus. The day following the accident, I performed Pirogoff's amputation. A drain tube of a quarter inch caliber was passed between the tendo-Achilles and the approximated os calcis and tibia, one end of the tube protruding at the inner angle of the wound, the other escaping through an opening behind and below the lower end of fibula. The wound was closed with silk

* Read before the National Association of Railway Surgeons at Kansas City, Mo., May 2, 1890.

gut suture, which included all the soft tissues between the bone and skin on both lips of the closed wound. The tendo-Achilles was next subcutaneously severed, and after the usual dressings were applied, I placed the os calcis in a splint formed from a tin dipper the bowl of which was perforated numerously, while the handle, about 10 inches long, was placed perpendicular to the bowl. Another handle was soldered on opposite side of the bowl. Thus the two handles passed one up each side of the leg, and were there secured by plaster Paris bandages. In this way I secured perfect immobility to the remains of the os calcis — closely held against the tibia.

Drainage was perfect. Only two dressings were required within the first week, the second one for the purpose of removing the drain tube. Primary union took place except in the track of the tube, where a serous discharge, very scant, lasted but ten days. The patient was on his crutches on the 18th day, and soon left for his Northern home. Ten months later, a letter informed me that he could climb ladders as easily as before the accident—that his stump only ached a little after a hard day's work. He was a paper hanger by trade.

Case II. Chas. Lawhorn, 31 years of age, colored, brakeman on the L. N. O. & T. Ry., was injured at Clarksdale, 100 miles below Memphis, by the passage of a *slowly revolving* wheel of an empty freight car across his left instep; producing a compound, crushed wound, with fracture of various tarsal and metatarsal bones. He arrived at Memphis the following day, Feb. 7, '89. Amputation was clearly indicated, but the worry of the trip as well as shock of the accident were apparent, and being an advocate of secondary amputations in preference to primary ones, I delayed operative interference until the next morning when I performed Pirogoff's amputation. The same means of drainage, method of closure of wound, tenotomy, dressings and splint were used in this case as described in case 1. I was less fortunate (doubtless due to unsanitary surroundings of his house) in this case than in case 1, inasmuch as suppuration followed and was quite profuse. The "laudable ooze" was daily syringed

through my drain tube and all ended well. The patient has an excellent stump, is now employed by the same road, and says he experiences no pain nor tenderness nor ache anywhere in his limb, even after long walks. And he gets over ground with about as much ease as does the average man.

Case III. Jan., 85, Frank Crosby, æt. 19, white, switchman on M. & T. R. R., was run over by front wheels of a locomotive—the left leg crushed at the middle, the right foot being crushed through the instep. The shock was so great that amputation was strongly contraindicated, and it was only on the third day that his pulse warranted an operation. Ether was given, and my brother, Dr. S. A. Rogers, performed a flap amputation at upper third of left leg, while I performed Pirogoff's operation on the right extremity. I made no provision for drainage, nor did I sever the tendo-Achilles. The patient rallied very slowly after the operation and was delirious and very unruly for quite a week, during which time he did much mischief to both wounds, and it was only after a tedious ten weeks that he was able to be moved to his home in a distant city. The union between the os calcis and tibia was by granulation. I was not able to learn anything of him after he left me, and as the parts had at that time barely cicatrized, I am unable to say anything of the usefulness or the contrary of this right limb.

Each one of you I dare say left the walls of his *alma mater* dreaming of his name becoming famous at no distant day by reason of a successful ligation of the R subclavian artery, or else following in the footsteps of the renowned French surgeon, you would boldly explore the cranial cavity and evacuate an abscess deep in the brain of some unfortunate. Or possibly you would cast the shadow that would dwarf the glory of a Spencer Wells or a Lawson Tait. I for one confess to such treasonable ambitions, and I recall it also that so humble an operation as Pirogoff's was not beyond my greed. The Professor of Surgery where I was first taught presented the photo of a successful Pirogoff's, and so pictured the rarity of success as to pronounce a success a surgical curiosity. A few days later I recognized the possessor of the successful

Pirogoff stump hopping about on crutches, unable to use the stump, though it was quite eight years of age. Thus was I still more strongly impressed with the idea that it was a rare feat to score a good stump in this operation. Such teaching should doubtless have led me to avoid the operation; but not so—a minor degree of longing after the impossible made me keep an eye for an opportunity to operate. Such I say were my first impressions of the inutility of the practice, and such I dare say is the feeling implanted in the minds of many by college professors as well as by the older textbooks. It is the duty then of you, my hearers, the practical surgeons of to-day—of the aseptic era—to refute the old idea that a successful Pirogoff is a surgical curiosity if you can.

I present the question, Is Pirogoff's amputation justifiable? I present this question, not prepared on a limited experience either to defend or oppose the procedure, but with a view of eliciting a full and free expression of the opinion and concensus of experience of men of longer service in railroad surgery—for it is for the most part a question of concern to railroad surgeons. The question of the utility of the stump in after life is the main one, and anyone of us may have this condition presented for treatment at any day. It is not a question of choice between the various modifications of Pirogoff's amputation, but of the usefulness of the stump in any of them.

CULLINGS FROM GERMAN EXCHANGES.

WM. KRAUSS, M.D., MEMPHIS, TENN.

A Discussion on Gall Stone Surgery.

1. An appropriate method for operative removal of gall stones. Dr. E. Senger, specialist in surgery, Crefeld.

2. The ideal cholecystotomy, in two steps. Note by A. Wölfler, Gratz.

3. On the "appropriate" method, &c., of Dr. Senger. Prof. Langenbuch, Berlin.

4. A few remarks on gall stone surgery. Dr. E. Senger, Crefeld.

Author of 1st describes a new operation with report of a case. Objects to procedures now in use, also to the more pop-

ular plan of cystostomy, which though relatively less dangerous, results in erosion of integuments, and is apt to leave permanent fistula. Langenbuch's total extirpation is criticised on account of greater danger, inapplicability in many cases, unphysiological principle, and difficulty of recognizing indications laid down by L. Author thinks the "ideal" method of Barnays and Küster (of emptying gall bladder, stitching and at once dropping back in its place) the most perfect in principle and theory, if there was any guarantee of sutures remaining intact; but unfortunately, the bladder is usually so inflamed and infiltrated, that we are never called upon to operate until this condition exists. Operation: 1. Gall bladder is brought well out of peritoneal cavity, fixed by a stitch and supported by iodoform gauze. 2. After one or two days stone is removed and bladder sewed up; if sutures fail to hold, a second, third, or even fourth attempt may be made, bladder being now extraperitoneal. 3. The plastic adhesions may now be broken, or bladder allowed to recede of its own accord. In the case operated he had troublesome hemorrhage in getting gall bladder out. Second step in 42 hours, abscess formed in abdominal wall because of imperfect adhesions; gall bladder bursted on examination in 2 days; second suture successful; third step not executed. Recovery in 3 weeks.

Author of 2d had already successfully operated on this plan 3½ months prior to S.

Author of 3d severely criticises every count in S.'s article. Thinks Senger got partial adhesions in spite of iodoform gauze, as it takes ten to twelve days for closure after careful stitching. Thinks instances where gall bladder can be brought out through opening far enough to be held by simply supporting it, are very rare; that it is not always in pathological condition. The best way to reform the ideal operation is to bring bladder to opening, secure, open and reclose at once with Lembert or Czerny sutures; that danger from hemorrhage in total extirpation existed "as good as not at all," and that this removes the locus morbi.

4. Senger in his reply cites a case of Langenbuch's in which death resulted in 22 hours from hemorrhage; that the idea of removing locus morbi was unphysiological, a new gall bladder

being formed, as shown by Oddi, and that gall duct is as apt to be the seat of further trouble. To the charge of short time allowed for closure, he says plastic closure is all that is needed, and that iodoform gauze did not prevent adhesions any more than other antimycotics. Had himself called attention to inapplicability of his plan in shrunken gall bladder.

For a good many finer points in the discussion, it is necessary to refer to original in *Berl. Klin. Wochenschrift*, Nos. 2, 5 and 16.

Bœnnecken—Results of Excision of Varices on Lower Extremities.—Author reviews Madelung's report of Rostock clinic in 1884, and other literature, from which it appears opinions are divided on the subject of recurrence. At Madelung's clinic 32 cases have been treated in 7 years, and in the worst of these the radical operation was done; not a single recurrence to date. Operation: Patient is anæsthetized, limb allowed to depend from table until varices swell up. At the upper third of thigh a rubber tube is loosely tied, to stop venous, but not arterial, circulation. Extremity replaced on table, any ulcers scraped or circumcised, and after longitudinal incision veins are peeled out (for 4 inches on each side of incision if necessary), veins removed with blunt instrument (partly torn out), artery forceps applied, and at close of operation tourniquet removed and larger central ends tied. Pockets are drained by small button-holes in skin, larger ones by drainage tubes. Continuous suture, iodoform gauze, aseptic moss pillow, compression, light splint and vertical suspension. Change of dressing in 10 days. Thiersch's transplantation when necessary. The least rise of temperature calls for change of dressing; small abscesses may thus be nipped in the bud. No untoward symptoms observed. Necessarily not always primary union.

Report of 15 cases. Duration of disease, from 1 to 24 years; of treatment from time of operation, 10 to 70 days, average, 40; time elapsed since cure, 6 months to 7 years. One recurrence in another part of leg; operation and permanent cure. Usually massage of scar before dismissal.—*Berlin Klin. Woch.*

DEPARTMENT OF

GYNECOLOGY.

EDITED BY

T. J. CROFFORD, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

TREATMENT OF LOCAL AND GENERAL PERITONITIS.

The above is the title of a paper read at the recent meeting of the Alabama Medical Association, by Dr. W. E. B. Davis of Birmingham.

From a study of the experiments of Pawlowsky, Grawitz, Wegner and others, he thinks the following points pretty well settled:

First. Simple peritonitis, when caused by a sufficient quantity of a chemical irritant, will produce death by the extent of the inflammation.

Second. Simple inflammation may terminate in septic peritonitis, by producing a weakened condition of the walls of the intestines, which permit the passage of septic germs from the intestinal canal into the peritoneal cavity.

Third. While pathological germs in a small quantity may be absorbed by the healthy peritoneum, without producing a peritonitis, the same quantity combined with a chemical irritant may produce a violent inflammation—the irritant having prevented the absorption of the germs and caused the exudation of a nutrient fluid for their multiplication.

Fourth. Large quantities of septic fluids and microbes alway produce suppurative peritonitis; yet, a small quantity of either may be absorbed and destroyed, unless the peritoneum has been weakened by antecedent pathological changes.

Fifth. A septic fluid may gravitate into dependent parts of the peritoneum, and become shut up, either by plastic inflammation, or by a coil of intestine, and thus be prevented from producing diffuse peritonitis, but after a time this may rupture and produce death from general peritonitis.

Sixth. The germs of septic peritonitis will be found in the kidneys and other organs of the body, and in greater quantities, according to the extent and duration of the inflammation.

Seventh. The condition of the peritoneum, and the nature and quantity of the septic product will determine the rapidity of the inflammation, which usually ends in from 48 hours to 6 days, but death may be produced from shock in a few hours. Tubercular inflammation is always slow in its progress.

From a consideration of the foregoing principles, he says the following indications for treatment must be arrived at:

1. Promote absorption of the inflammatory products of simple peritonitis as rapidly as possible, and thus relieve the inflammation and prevent the possibility of septic peritonitis.

2. In the early stage of peritonitis, whether simple or septic, where the cause can not be determined, hasten the absorption of inflammatory products, etc., with purgatives.

3. When medical treatment fails to give relief, septic fluids should be removed by operative procedure.

4. In localized peritonitis—with circumscribed pus formation—the pus should be removed and the abscess cavity drained.

5. In acute septic peritonitis, operative procedure must be adopted early or there will be no chance of recovery offered by the operation, as the inflammation will become more extensive the longer it continues, and too, there will be so great a quantity of septic germs absorbed into the system that death will result from toxæmia, even though the local inflammation should be remedied by a late operation.

He quotes from Habershon and others, and states that it has been demonstrated, that in the large majority of cases, peritonitis is a symptom of some well-recognized lesion of the abdominal or pelvic viscera, and that the only rational treatment must be based upon this conception of the disease. Peritonitis is not a "disease distinct," as taught by Bichat, and upon which teaching the treatment of Alonzo Clark gained such great popularity. The "opium splint" is irrational, for it not only locks up the products of inflammation,

but as shown by Wylie, Johnson, Baldy and others, and by his own experience, subjects the patient to one of the greatest dangers of the disease, viz: obstruction of the bowels from adhesions.

In case of perforation of the bowel, opium is indicated to relieve pain and shock, and to prevent peristalsis, and further escape of the intestinal contents into the peritoneal cavity. Again, morphine hypodermically may be used, with benefit, in some cases when there is persistent and uncontrollable vomiting; but at the same time, calomel in small and frequently repeated doses, may be dropped on the tongue and the bowels induced to act. There are many cases in which it is absolutely necessary to give a hypodermic injection for pain, but this should never be given in such doses as recommended by the advocates of the opium treatment, and should not be administered at all unless the patient's condition is being made more grave by the shock provoked from pain.

The first two indications for treatment are best met by free purgation, as taught by Tait and others, and the majority of those who have adopted this plan select the magnesium salts, as they produce very large watery stools. When the stomach rejects salts, calomel may be used.

He refers to a large number of cases treated by him in the most satisfactory manner by purgation—and among them several cases of threatened peritonitis, after laparotomies. During the past year he has not waited for symptoms of peritonitis after a laparotomy, but begins the use of small doses of salts, and if not retained, of small doses of calomel, a few hours after the patient gets from under the influence of the anæsthetic, and aids the purgative by the administration of enemas of milk and whisky every third hour, which relieve thirst, and stimulate and nourish the patient, if retained.

In these cases he has had to give an occasional hypodermic of morphine, but this did not prevent the bowels acting. He has had to depend on calomel oftener than salts, as it was not rejected. He reports cases illustrating how purgative treatment aids in diagnosis, and others to show how all symptoms may be masked by opium, and an operation delayed too long—and concludes by stating that it is very important

not to resort to the free use of morphine, unless an operation has already been decided on, and this administered to relieve pain and lessen shock.

After cases of abortion, or delivery at full term, in addition to large doses of ergot, to produce rapid involution of the uterus, he has his patients, within 12 or 16 hours, take a decided dose of salts to prevent peritonitis.

He reports a number of cases of perityphilitis, and advocates early operative interference. Since the cæcum and appendix are always completely invested with peritoneum, as demonstrated by Bull, the abscess of the appendix must be intra-peritoneal at the beginning, as has been shown by the experience of McBurney, Weir, Wylie, and others.

He agrees with Wylie that should the symptoms of local peritonitis, in the region of the cæcum, not begin to improve by the fourth or fifth day from saline treatment, and local applications over the seat of the inflammation, an incision should be made down through the muscles and the peritoneum dissected up, until a place is found where the abscess is attached, and then opened. While the operation would be easier if delayed, the danger of the abscess rupturing and producing acute septic peritonitis must be borne in mind, and hence the increased difficulty in doing the operation is more than compensated for in the risk saved the patient.

Cases are reported to show that a negative result with the hypodermic needle should never cause a moment's delay in operating. He operates just as promptly when he can find no pus.

He endorses the views of those who advocate the removal of the appendix in frequently repeated attacks of appendicitis, for the same reason that he would remove the tubes and ovaries for recurring attacks of pelvic peritonitis—when they are the cause of the inflammation.

In acute septic peritonitis, as met with in child-bed fever, or after perforation of the bowels, or from the emptying of the contents of an abscess into the cavity, or after operative procedures, or accidental traumatism, such as stabs, gun-shot wounds, etc., nothing short of a laparotomy can afford any

chance of recovery—and this will not offer much prospect unless done very early.

He quotes the experiments of Pawlowsky, and recites his own experiments on animals to demonstrate how rapidly septic peritonitis may be developed and produce death. He also reports a number of cases of gun-shot injuries and stabs of the intestine in which he has seen violent attacks of peritonitis developed in a few hours, and in which the symptoms before operation did not indicate its development. Hence, when the abdominal cavity has been entered, it should be opened and explored immediately. To wait for symptoms is to wait too long. Give morphine to relieve pain and shock, and operate even though the patient should feel perfectly well after the relief thus afforded.

In cases of perforation of the appendix, etc., the operation should be done at once—unless the patient is almost pulseless—as by so doing the shock will be relieved. The same rule will hold in cases of ruptured abscesses. In cases of perforation in typhoid fever, the condition of the patient, before the accident, must be taken into consideration, as pointed out by Mears; but as this is a fatal accident, unless it can be remedied by operative measures, this procedure should not be condemned without having been tried in a larger number of cases.

After a review of the open plan of treatment as suggested by Dr. B. E. Hadra,—which he condemns—he recommends the following method which should be adopted in all cases of *acute general suppurative peritonitis*, and which will allow of the complete exposure of the abdominal cavity, the removal of the cause of inflammation, and assist in restoring the functions of the intestines:

The abdomen is opened in the median line; the cause, if found, removed; the cavity thoroughly douched with hot water; all adhesions broken up, and, if tympanites is not marked drainage tubes are introduced, through which the cavity may be washed out, as indications require. If the cause be found in the region of the cæcum the drainage tubes should be introduced through a second incision in the right iliac region.

In those cases in which tympanites is marked, causing pressure on all the abdominal organs, and thus creating much constitutional trouble, it will require special attention, and upon this point he lays great stress; for this condition is a dangerous one of itself. Not only does the weakened intestinal wall permit of the continued passage of septic germs into the peritoneal cavity and afford constant infection, but it must be remembered that the bowel cannot be replaced without great pressure and consequent traumatism, which will often kill in a few hours from shock thus induced. In advanced cases of peritonitis it must also be remembered that the walls of the intestines are rendered inactive by inflammation, and the power of contraction cannot be restored until the inflammation is relieved; and hence, the bowel will continue tympanitic and the exchange of septic germs kept up, unless this condition is remedied. Dupaul punctured the intestine with a fine hollow needle in cases of tympanites, with dangerous pressure symptoms, and this has been recommended by the leading writers up to this time; even Senn refers to this as a procedure which may be resorted to. This has been tried by the author a number of times and he was never able to see an appreciable decrease in the tympanites, and he argues that it is not reasonable to suppose that a paralyzed bowel could expel any quantity of gas through a needle. He has also practiced making incisions into the bowel, and by pressure attempted to expel the gas, but this does not prove satisfactory. He considers the best method of relieving a distended paralyzed gut, full of poisonous gas, is to fill it with hot water, and this will not only free it of tympanites, but in getting rid of the gas and feces, etc., prevents infection.

Hence, in extreme cases, he believes an opening should be made in the lower part of the ileum, and the bowel thoroughly irrigated. An artificial anus should be formed and the bowel irrigated through a soft tube as necessary to prevent tympanites and adhesions. Purgatives can have but little effect on a bowel, in fully developed septic peritonitis, when nearly all the coats are inflamed; so we must reach it mechanically. With this plan the colon can be washed through

a rectal tube, the small intestine irrigated as required through the artificial anus, and the peritoneal cavity drained and douched.

This method meets all the indications for treatment, and is the one which should be adopted in all cases where marked tympanites is present.

CÆSAREAN SECTION vs. PORRO'S OPERATION.*

[From Therapeutische Monatshefte, March, 1890.]

Piskacek of Vienna (*Wiener Klin. W.*), defends Porro's operation against Sänger, who declares himself against "mutilation," and in favor of his modified Cæsarean section.

R. Schäffer, in making reference to this paper, thinks that whilst in certain indications, viz., atresia of vagina, pelvic tumors, infection in the body of the uterus, etc., Porro's operation generally has the preference, there are still others, such as severe osteomalasia and "absolutely" contracted pelvis, where the question is a mooted one.

Author declares himself positively in favor of Porro's operation, because the incidental spaying leads to a cure of the general disease. In "absolutely" contracted pelvis, Sänger does not favor Porro's operation until "after repeated classical Cæsarian section." As Fehling pertinently puts the question, How often does a woman have to undergo this dangerous operation, before she may be permitted to be permanently protected against it? Author is of same opinion and recommends Porro's operation at once.

The statistics of the two operations cannot from the nature of things be made use of, but rather the dangers from a renewed pregnancy in a once sutured uterus should be borne in mind. If the conjugate diameter is above 7–7½ cm. (2.4–2.6 inch), artificial premature labor would be the only rational treatment, and better for both mother and child. The mortality of former at many clinics is 0, and that of latter between 21 and 30 per cent., a decidedly favorable result.

The question of deciding between Cæsarean section and embryotomy is considered at length, and the author is in

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* Translated from the German by Wm. Krauss, M.D., Memphis.

favor of temporizing, as a normal birth is rarely entirely out of question. Should there be any danger threatening the mother, embryotomy should as a general thing be preferred. The reasons, though very interesting, are too lengthy to be enumerated here. Author then gives detailed histories of 5 Porro's and 4 Cæsarean operations from Brisky's clinic. In the Porro's operations, treatment of uterine stump was always extra-peritoneal, and fastened to abdominal integuments by acupuncture needles. The wire ligatures were removed on tenth day, at first change of dressings. All of the 11 cases recovered.

The four conservative operations (Cæsarean) were done for rachitic or deformed pelvis. Uterus sutures were wire and silk. Author prefers silk, as less irritating, and less apt to leave fistulæ.

VESICO-VAGINAL FISTULA—OPERATION.

T. J. Crofford, M.D. :

DEAR DOCTOR—As a reader of your valuable journal, I feel much interest in the department over which you preside, and take the liberty of reporting a case of vesico-vaginal fistula on which I recently operated with most gratifying success, and which I trust will be of sufficient interest to merit notice.

Case I. Mrs. B., age 40 years, white, had white swelling in left hip when quite young, resulting in much shortening of the limb and some deformity of the pelvis on corresponding side; was called to see her during last confinement, four days after labor pains came on; found her almost pulseless and unconscious; administered stimulants hypodermically and delivered with forceps. Patient rallied after several hours of persistent stimulation and became conscious. From long continued pressure of fœtal head against the pubic bones, the intervening parts (vagina and bladder) were injured, and vesico-vaginal fistula the result.

The fistula was directly across the neck of bladder, three-fourths of an inch long and impairing the integrity of the sphincter muscle. Constant dribbling of urine caused vaginitis for a time and delayed operation.

On the 20th day of April I operated upon this case, assisted

by my friends Dr. Chesley Daniel and Dr. Sam Gholson, jr., and in the presence of Drs. Maclatchy and Scruggs. The patient was anesthetized and laid upon the table in Sims' position; Sims' speculum was used, and the edges of fistula pared with curved scissors and bistoury. Silver sutures were used, four of which were placed one-sixth of an inch apart, entering half-inch from the edge, on vaginal surface and just touching the vesical mucous membrane, coming out half-inch from edge of other lip of opening. By scraping the ends of my wire sutures with my knife, I was able to arm my needles without the intervention of silk thread and found no difficulty in passing them through both sides of wound without withdrawing the needles. After bringing the surfaces of wound nicely together by means of the fingers and wire, they were secured by twisting the sutures with forceps and cutting them off half-inch from surface; these were bent down flat upon the vaginal wall to prevent irritation.

During this operation a silver catheter was kept in the bladder as a guide to prevent stricture of urethra, which was half-severed by the ulcerating process just at its vesical junction. Urine passed constantly through the fistula during the operation until it was closed, after which and up to this time, no drop has escaped this way. On the 12th day the sutures were removed and a complete and perfect union was found, with no difficulty in passing the urine in the natural way, nor any incontinence. The catheter was not retained in the bladder after the operation, but was carefully introduced once daily to guard against an accumulation of urine. The bowels were gently moved by enemata and the patient well fed, as she was quite feeble and showed evident signs of anemia. Morphine was given occasionally to procure rest and sleep. There was but little pain felt at any time and the patient recovered without a bad symptom. She was confined to bed for several days, but after the removal of the sutures twelve days after operation, she was allowed to go as she willed. In her condition before operation life was indeed a burden, as the constant dribbling of urine rendered it almost impossible to keep down the offensive odor, and she frequently declared

she preferred death to dragging out such a miserable existence. She is now a sound and happy woman.

In this operation I have followed to some extent, each of the celebrated gynecologists, Sims, Bozeman and Simon, and I certainly lay no claim to originality or superior skill; I simply report it because it presents some unusual features, in that the ulcerative process involved the sphincter muscle and upper part of urethra, requiring great care to avoid stricture on the one hand and incontinence on the other.

Your obedient servant, R. H. PEEL, M.D.

Holly Springs, Miss.

DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

EDITED BY

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A CASE OF PERSISTENT PUPILLARY MEMBRANE.*

FRANK TRESTER SMITH, A.M., M.D., CHATTANOOGA, TENN.

Prof. of Diseases of the Eye, Chattanooga Medical College; Formerly Asst. Surgeon New York Ophthalmic and Aural Institute.

Jno. Sully, æt. 22, residing at 849 East Ninth street, Chattanooga, was referred to me by Dr. Trippe Oct. 12, 1888, with the following history: Never had inflamed eyes at any time. First noticed that he did not see well with the right eye six or seven years ago. Previous to this was not aware of any defect. The eyes do not trouble him in any way.

Status præsens. The left eye is of normal appearance. The ophthalmoscope shows hypermetropia of 1 D. The fundus and vision are normal. The right eye presents an opacity wedge-shaped on the anterior capsule of the lens, nearly central. It is less than a line in length and half a line wide. From the upper part of this two very fine threads are seen running upward and outward and attached to the anterior surface of the iris about one-fourth the width of the iris from

* Read before Tri-State Medical Association of Alabama, Georgia & Tennessee.

its pupillary margin just outside the *circulus iridis minor* to the *circulus iridis major*. The threads are of equal thickness throughout and are almost as fine as spider webs, but are readily recognizable from their white or rather light gray color. From the lower part of the opacity two similar threads extend downward and outward to a corresponding part of the iris. They differ from the two former in that the ends attached to the iris are enlarged and fan-shaped, so that the attachments are comparatively broad. The two pairs of threads make an angle of about 45°, one with the other. They hang loosely in the aqueous. They are not drawn tight. The pupil is normal in size and motibility. The lids, conjunctiva and fundus all appear normal. The ophthalmoscope shows a hypermetropia of 2°. The vision of the eye is $\frac{5}{200}$. He counts fingers about 5 feet.

Under the influence of atropine the threads are drawn tight when the iris is dilated *ad maximum*. There is hypermetropic astigmatism, with convex 3 D combined with a cylindrical convex of 1 D, axis vertical. The vision is brought up to $\frac{20}{100}$, which is a considerable improvement over $\frac{5}{200}$.

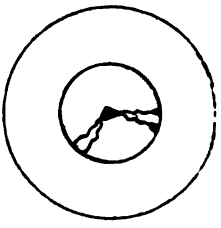

Fig. 1

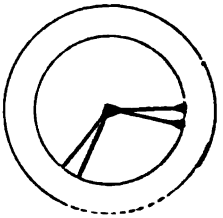

Fig. 2

See Fig. 1, which shows the condition with an undilated pupil, and Fig 2, in which the pupil is dilated with atropia.

The case is one of interest from its rarity. Out of 26,408 new cases at the New York Ophthalmic and Aural Institute from 1883 to 1887, there were but three cases of this kind recorded, or about one in 9000 eye cases.

The pupillary membrane is a fœtal structure which normally disappears about the time of birth. When persistent, the threads often anastomose. They are not generally attached to the lens capsule; oftener, they are attached to a pigmented

disc which is in the center of the pupillary space. They sometimes extend all the way across the pupil. Their true nature is often overlooked, as they are taken to be simple adhesions to the capsule of the lens.

One practical point is well illustrated in this case. Where one eye is defective, this is often overlooked by the patient until his attention is called to it by a special examination. Nothing is more common than for patients to give the exact time when an eye became affected, when from the nature of the case we know that the infirmity must have existed much longer. This is simply because they have never tested the eyes separately.

Treatment. As to treatment, the only point to remember is to let it alone. The bands could be cut and the opacity probably removed, but it would be at the risk of producing a traumatic cataract; for as a rule, injuries to the lens capsule cause the lens to become opaque.

In this case the poor vision is produced by two causes: first, the opacity; and second, the abnormal refraction. We have seen that the vision was brought from $\frac{6}{200}$ to $\frac{20}{100}$ by glasses. A more careful examination would undoubtedly have improved on this. In addition to this, the left eye is hypermetropic, so that glasses would seem to be indicated. For all practical purposes he uses only the left eye, and that is sufficient. As long as the abnormal refraction causes no trouble it is as well to leave it uncorrected, for it is a mistake to put glasses on every case of hypermetropia that may be accidentally discovered. I believe this is the general practice of oculists, whatever may be said to the contrary.

Dr. James E. Reeves inquired whether the condition might not have been due to some previous inflammation. Dr. Smith said that it might, but that the inflammation had taken place in utero, causing the pupillary membrane to thicken and grow fast to the lens capsule, and it had failed to be absorbed at the proper time.

Dr. Max Thorner agreed with Dr. Smith as to the diagnosis and treatment, and related a case in which an operation was attempted without any good result.

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Secretaries of medical and surgical societies will favor us by sending dates of regular meetngs, with brief programme of important subjects coming before the meeting.

All matter must be in our hands on the tenth of the month preceding its publication.

The JOURNAL will be issued on the fifth of each month.

All communications other than provided for above, should be addressed to

JAS. L. MINOR, M.D., Editor,
Memphis, Tenn.

THE BENEFITS CONFERRED BY LEGISLATION.—We print below a verbatim copy of a letter from a *legally* qualified practitioner of Tennessee.* The letter is to a former employer, from whom the writer desires assistance and employment. It reads as follows:

Dear Sir i wad like to hear from you if you can give me chance on your home plase i wad want purty good house i hant labor enny for over a year i have ben pract fisic i am Lisen Doctor now now if you will help me to git thar and want me i wil come as son as i can git thar i have one horse to ride i wad Bring him i am willing to help tend to your bisness rite what sort of a chance you wad give me and help me to git thar

rite son & fail not for i must what i can do i git plenty practtis hear tho the peapel is got no money to pay a Doctor i live in * * * i think i can Doctor and tend to farm to so if you wad like to have me back thar & can help me to one hunder dollars this year i will do Just what i say you never lost Eny thing when i live thar i can git thar with $25 Dollars rite just what you will do and rite in hast & if you dont want me i wad like to no hit son you did offer me your home plase in 2 years & hit ben 3 years rite son

your friend good by

* This man obtained his license through the County Clerk, by registering as a practicing physician, before the law restricting the practice of medicine went into effect. Hence the Medical Examining Board is legally bound to respect it.

Can any medical man read this letter and willingly submit to recognizing the writer as a brother practitioner? Can any layman read it and willingly accept the writer as a proper medical adviser for himself, his family or his friend? Can any community afford to tolerate such ignorance in a profession which has its general welfare, through direction of medical and sanitary matters, in its keeping? Can a better commentary be made upon the condition of affairs before the passage of our medical laws, or stronger argument adduced to prove the wisdom of the enactment of laws restricting the practice of medicine to those qualified to follow it?

The law was not retrospective, hence none could be excluded who registered his claim to practice prior to its enactment. While our State Board of Medical Examiners will free us from newcomers of that stamp, they are far from possessing that power which should be vested in them. They should be allowed to raise the standard of medical education required; they should be the sole arbiters of the fitness of candidates to practice in the State, and should be granted the power and the means of enforcing obedience to the law. We are in favor of effecting such changes as will give us a law which has been in successful operation in Virginia for 6 or 8 years. There, the Governor appoints one examiner from each congressional district in the State. These meet, organize and appoint a certain number of examiners to each of the various departments of medicine, who, in turn, prepare a given number of questions in the several departments. Each question is numbered and valued, and candidates must write their answers and attain a standard of at least 80 per cent. The examination papers are handed in in sealed envelopes, and are examined by others than those who propounded the questions. The candidate does not sign his name to his papers, but affixes a number or title which is duplicated on a sealed envelope which contains his name. The papers are examined and acted upon by the entire Board, before this envelope is opened and the name of the candidate is known. This method is employed at the regular meetings of the Board, which are held semi-annually, we believe. Candidates desiring examinations at other times, may appear before any three of the exami-

ners, and stand a written examination before each one. These three may grant a license to practice if the proper standard is reached. The examination papers remain with and become the property of the Board.

PLAGIARISM.—We are always glad when articles published in our pages receive the notice or commendation of other medical journals, for it shows the worth of the MEMPHIS JOURNAL OF THE MEDICAL SCIENCES. We are glad, too, to contribute to the general store of medical literature, and pleased to submit to the gleaning process, which we practice upon our neighbors. But we insist upon, and common justice demands, proper recognition of the source of information in every instance. This journalistic courtesy is, we are glad to say, usually shown; hence, we are surprised to see in the April issue of the *Cincinnati Medical Journal*, under the head of *Original Communications*, an article which was written for and published in the March No. of the MEMPHIS JOURNAL OF THE MEDICAL SCIENCES. The article referred to was by Dr. W. P. Barton of Malone's Landing, Miss., on *Hæmaturic Cinchonism, Commonly Called Malarial Hæmaturia*, and the Doctor, in justice to himself, has written us that the manuscript was sent to us alone, and appeared in the other journal without his knowledge or consent. Yet the *Cincinnati Medical Journal* publishes it not only as an original communication, but makes it the leading article of that issue; hence it cannot claim obscurity as an excuse for negligence. We do not care to engage in a polemical discussion, for it is useless, but content ourselves with a statement of facts which we offer for the digestion of our omniverous contemporary, and the reflection of fair-minded journalists.

Notwithstanding the large number of Hypophosphites on the market, it is quite difficult to obtain a uniform and reliable syrup. "Robinson's" is a highly elegant preparation, and possesses an advantage over some others, in that it holds the various salts, including iron, quinine and strychnine, etc., in *perfect solution*, and is not liable to the formation of fungous growths.

STORIES OF A COUNTRY DOCTOR is the title of a very readable book which deals with pioneer life in Missouri, and the personal experiences of the author in the practice of medicine for a quarter of a century. It is written in a free, easy and conversational style; contains much that is interesting and abounds in amusing and laughable episodes. The book is well gotten up; the print is good, and the illustrations are numerous and expressive. It is published by the author, Dr. Willis P. King of Kansas City. Price, $2.50.

Memphis Journal of the Medical Sciences:

The Bolivar County Medical Association met at the courthouse in the town of Rosedale on Monday, May 5th, and closed the first year of its existence, Prest. T. A. Harris in the chair. Many papers of interest were read and discussed. The President's address was an elaborate exposition of medical ethics and the duties of the profession. The society is in splendid working order, and is a source of pride to each and every member. The following officers were elected for the ensuing year: Dr. A. Miller, Mound Landing, President; Dr. J. C. Brooks, Concordia, Vice-President; Dr. W. H. Nance, Gunnison, Secretary; Dr. O. Jones, Beulah, Treasurer.

MEMBER.

ARTIFICIAL EYES MADE OF CELLULOID.—The Paris correspondent of the "*Journal of the American Medical Association*" mentions an intense fœtor which sometimes results from the use of celluloid artificial eyes. The odor resembles that of bromine; the material is said to contain monobromide of camphor. The writer suggests that there is a liberation of bromine under certain conditions of its contact with the tissues beneath it, and the extraordinary odor thus arises. These artificial eyes are said to come from Germany, but the place of their manufacture is not known to the writer. Professor Gayet of Lyons, is the observer of the facts noticed.—*N. Y. Med. Jour.*

BLUE RIDGE SPRINGS DYSPEPSIA WATER.—We would call special attention to this excellent mineral water, which can be had of all druggists. The analysis shows, and experience has

demonstrated, that it is purgative, tonic and alterative, according to quantity used. Mr. J. S. Robinson is the agent here, and will see that all who need it are supplied. See adv.

S. E. RIDGELY is out in a new card, announcing a full line of spring and summer goods. This reliable house needs no guarantee to those who have been its patrons, and to those who have not, we can conscientiously say, that as a tailor and draper, Mr. Ridgely has no superior in the United States; and his goods are the finest in the market.

There is no remedy better known than Tarrant's Seltzer Aperient, which can be profitably used in all conditions where alkaline medicines are indicated. In addition to its aperient and antacid qualities, it is an admirable vehicle for the administration of the salicylates, lithia salts and tincture of iron. Its pleasant taste and gentle action render it a very desirable remedy in the treatment of women and children.

FISHER & BOSTWICK, DRUGGISTS, have bought out the house and good will of Henry J. Heister, and are prepared to serve the public and physicians with accuracy and celerity. They have enlarged their stock and increased their facilities. They keep nothing but the best articles, and we commend them heartily. Special attention is paid to prescription work.

DOWDY & Co.—This reliable house continues, as heretofore, to occupy the front rank in the drug trade. They keep always on hand a full line of the newest and most reliable chemicals; and as compounders, they have no superiors.

ORKNEY SPRINGS, VA.—We would call attention to the advertisement of this summer resort, and commend it to our professional friends and others who may desire to rid themselves of malaria by seeking a healthful climate, and alterative mineral waters.

THE

Memphis Journal of the Medical Sciences.

MEMPHIS, TENN., JULY, 1890.

DEPARTMENT OF

PRACTICE OF MEDICINE & THERAPEUTICS.

EDITED BY

B. G. HENNING, M. D.

S. A. ROGERS, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

PONCA COMPOUND, &c.

WM. KRAUSS, M.D., MEMPHIS.

Of late years a class of preparations, known as pharmaceutical specialties, have gained the attention of the physician, and are increasing at an alarming rate.

Persons with a limited knowledge of pharmacy, none whatever in medical sciences, and an abundance of cheek, have undertaken to teach us how to practice medicine. The sole object of these parasites is, of course, to increase their bank account at the expense of the patient's purse and health, and with the aid of the gullible practitioner. A name is coined, a fictitious formula put on the label, the pharmaceutical and medical press muzzled by big "ads," a glib-tongued agent sent on the road to throw dust in the physician's eyes, and then the robbing scheme can go on at its own sweet will.

It matters not if some (very few) of these preparations do have some therapeutic value; the point is, that if these sharks did not sail under false colors, they would not only be unable to charge ten prices, but they would find no market for their products. Supposing "Febriline, a tasteless syrup of amorphous quinine," does act as a febrifuge, could the unscrupu-

lous proprietor sell an ounce of it if he called a spade a spade? This fellow has actually used three different alkaloids in the same preparation at different times. At first it was cinchonine, and then when his little game was discovered, he put up a mixture of quinine and quinidine, and when this naturally failed to take, he took to quinidine. Yet, he has a long list of testimonials from prominent physicians.

Ponca compound is in compressed tablets, put up by Mellier Drug Co., St. Louis. The formula given is: Ext. ponca, 3 grs.; ext. mitchella repens, 1 grain; caulophyllin, ¼ gr.; helonin, ⅛ gr.; virburnin, ⅛ gr.; total, 4½ grs. It will cure anything in the gynecological line, including displacements. All you have to do is to drop a dollar in the manufacturer's pocket, and your prolapsus, displacement or leucorrhea has gone glimmering. But then why should the patient pay the doctor a fee for this? He can go to the apothecary and for a seventy-cent silver dollar, he can get just 395 grains of crude vegetable drug, the market value of which is probably thirty cents a pound.

Now as to examination: Some physicians probably don't know that an exact chemical analysis of an indefinite vegetable compound is impossible. But we need not go this far; each tablet, according to formula on box, should weigh 4½ grains; as a matter of fact it does not quite weigh 4 grains on an average. This is *misstatement No. 1.* Viburnin, etc., according to nomenclature are presumably resinoids, but these tablets *do not yield anything to alcohol at all!* Treated with 25 per cent. alcohol—to keep from spoiling, water is the best solvent—the soluble matter of two tablets is 5.54 grs. The insoluble residue, dried, weighed 2.35 grs. According to formula they should be *entirely soluble.* Now as crude vegetable drugs yield from 15 to 50 per cent. soluble matter—we will say 25 per cent.—we must add one-fourth of weight of residue to its total to restore it to its original form of crude drug, since we have exhausted it with the menstruum; this makes 2.84 grs. in two tablets, or 1½ grains in each of something *not stated on label.* This something is vegetable drug, as the microscope shows, and *not* a soluble extract; *misstatement No. 2.*

Deduct this 1½ grs. together with over ½ gr. short weight, and only a little over one-half of stated quantity of extracts remains.

If visible and ponderable differences are so glaring, how about their other claims? Can we depend on such a firm's statement at all, even though willing to believe that this stuff cures the whole list of uterine complaints? Have we not a right to doubt that such a thing as ponca exists? If this firm is so anxious to do the scientific thing, why does the cobbler not stick to his last, and give us description, plates, botanical name and history of the plant, and leave it to men who have studied physiology, etc., and are competent to determine its medicinal properties?

It is simply because they see others become rich off pharmaceutical specialties, because they have made money from like preparations, because they know from experience how easy it is to get reputable physicians not only to prescribe but to endorse these nostrums.

Granting that there is such a drug as ponca, have we, as physicians, not a right to know something about its habitat, natural history, active principles, etc.? Or, are we to be treated like little children who are not to be trusted with discrimination, with the right to combine it with other drugs to suit the individual case, instead of getting it dosed out, and get short measure at that?

This is becoming a serious matter, and I warn my brother practitioners against being tricked into giving testimonials for every shotgun preparation that comes along.

I shall have the pleasure to dish up a few more cases like this in my next.

CAMPHO-PHENIQUE.*

The revolution of medical science by the discovery of Robert Koch, in 1882, of the bacillus of tuberculosis, is only equaled by that of Dr. Jenner of the prophylaxis of vaccination. Villemin, in 1865, and Cohnheim later, demonstrated the infectious nature of tuberculosis by vaccination of ani-

*B. H. Detwiler, M.D., in Times and Register.

mals. It is not necessary to describe the bacillus, nor its manner of preparation, in order to be demonstrated by the microscope. The method of Koch-Ehrlich is probably the most satisfactory; all require care and patience, and the bacillus, when shown, unquestionably diagnoses this terrible disease. The manner in which the bacillus enters the system is of more importance than the heredity, which was formerly unquestioned. In families who suffer from this disease, heredity brings less power of resistance. The bacilli, probably from dried sputa, are inhaled; while eroded mucous membranes admit them into a soil peculiarly favorable for their propagation, and not fully guarded by the sarcophytes; with this beginning the end requires no prophet's ken; with this knowledge of the cause, it is a matter of extreme importance that a germicide should be discovered that could follow these parasites into the most remote capillary cells and not injure the structure of the lungs. Among the recent preparations offered to the profession, Campho-Phenique seems to possess the properties most desirable. It is manufactured by the Phenique Company of St. Louis, Mo. It is a compound resulting from the chemical union of crystallized carbolic acid and gum camphor; is a brilliant, limpid, volatile fluid; specific gravity, 0.9919; aromatic, not unpleasant, with a decided camphor odor; insoluble in water; mixes readily with alcohol, ether, and fixed oils; fluid under extreme cold; is antiseptic, anesthetic, and parasiticide. Applied to mucous membranes, causes temporary warmth, followed by anesthesia. It has over fifty per cent. of carbolic acid, which in combination with camphor, loses its caustic, but not germicidal properties. As a parasiticide it does not equal corrosive sublimate or carbolic acid, but its analgesic properties render it valuable and available.

In the case of Mrs. S., of Sullivan County, Pa., who was seen by some of you a year ago; who has, as you will observe, traces of epithelioma of the nose, cheeks, and rim of the right ear. Seven years ago, while living in Abilene, Kansas, she was advised to return home, as her case was incurable. When she came under my care, I placed her under the influence of conium, arsenic and cod liver oil. The whole extent

of both cheeks, over the nose, not extending to the eyes or forehead, was a mass of ulceration. You will notice a trifle of the alæ of the right nostril destroyed. Not improving markedly, after a year's treatment, I placed her under the local effects of Campho-Phenique, one part to three of liquid alboline, a product of the distillation of petroleum. You will notice that the nose is now covered with a healthy skin, almost free from color, and the ear has not degenerated. She is still under the influence of Fowler's solution of cod liver oil. You, who saw her when her face was a mass of suppurating granulations, will realize the pleasure she has in her improved appearance, not requiring the removal of the cancerous granulation, and covering of the face and nose with the sound skin of her forehead and arms.

This is the photograph of Master A., aged five years, an inmate of the hospital for the past three months. Two years ago, after the death of his mother, he was brought to my office; a knuckle of the dorsal vertebræ was protruding. Instead of placing him in the hospital, advised that he be taken home, placed on a solid bed, with a light weight to his head and feet, feeling assured that in time there would be bony repair. When he was brought here, I placed him in the ward. He has a large curvature of the spine, with a slight cicatrix, due to a large cold abscess, holding about a pint of pus. Drs. Nutt, Conley and myself opened it by aspiration; but, finding the debris too extensive, cut down into the sac, removed the pyogenic membrane, washed it freely with carbolic acid water, and filled the sac with diluted Campho-Phenique, until the walls were fully aseptic. It was closed with aseptic precautions, but in forty-eight hours had to be opened, washed out, and the cavity treated daily with this antiseptic, and in a week was entirely healed. In time, we had a plaster cast made, upon which a jacket of lumberman's flannel and silicate of soda was formed. He is now at home; a letter dated April 30, from his sister, states that he is out of doors all the day; the jacket fits him well, and, when not pleased at home, threatens to return to the hospital.

My experience with cold abscesses, heretofore, has not been satisfactory. I recall a boy that, twenty years ago, required

the opening of a cold abscess, which in time, indirectly, caused his death.

This is a photograph of Master C., aged fifteen years, an inmate of the hospital for the past six months. He is now an out-patient; a year or eighteen months ago, was treated for rheumatism; but the multiple abscesses of both arms, shoulders and elbows, and tibias, show necrosis. The left arm is anchylosed and extended, the right anchylosed and at right angles; both were extended when he entered the hospital. He was placed upon cod liver oil and syrup of iodide of iron; when toned up, was operated on by the surgeon-in-charge at that time, Dr. Hull, with Dr. Nutt and myself—an incision in the upper portion of the humerus, extending to the elbow joint, including it. The bone was soft and spongy where not necrosed; the recovery was rapid, but the fistulous openings remained. You notice the boy is strong, robust, red-cheeked, and quite a hustler among the newsboys. The first step toward recovery after the failure of the knife, was the injection, with a pipette, of Campho-Phenique, diluted one to four with alboline. In two weeks, nine pieces of necrosed bone were dislodged; and at this time, most of the fistulous openings of the left arm are healed, some of the right, and one tibia. Treatment continued.

In recent surgical injuries the application of the undiluted preparation asserts its pre-eminent superiority over all antiseptics heretofore introduced.

In the case of Master B., aged ten years, first articulation of ring-finger torn off in the brake of a handcar, except the palmar service; finger was placed on a splint, covered with cotton saturated with the Campho-Phenique. In one week the dressing was removed; finger healed. That evening, in a fight, finger was broken off, bleeding. In a few minutes after the adjustment of a splint and medicine he left the office whistling. Recovery was as rapid as before.

In gynecology I prefer it to iodine. The catarrhal diseases incident to this clime are very much relieved by its use in a spray. Take one to four of the mixture in any hand atomizer, throw the spray into the fauces and nasal passages. In a case of diphtheria of thirty-six hours standing, with the

fauces covered with a grayish-white membrane that I have found so unmanageable, this melted away under the soothing applications of this spray, and is the only case that I have seen since this subject was under consideration.

It may not answer equally well under all circumstances, but I see no reason why it should not when the disease is local. When constitutional, it can only be of value as a local germicide to the fauces, preventing fatal sequelæ.

In phthisis, I have had three cases. Two were young women; both had children rapidly; both pregnant; one a forlorn case, a sister dying a year before, under similar circumstances. Her physician diagnosed her case fully and honestly; she lived, as he stated, long enough to see her babe doing well. The other, with aphonia of six months' standing, is recovering—child doing well—but does not expect a restoration to health; is satisfied with freedom from the harassing cough due to the viscid secretion of the fauces and tonsils. Third case, near the menopause, doing well, but will not recover. The analgesia is not deep nor protracted, yet gives comfort in deep inspirations of the spray, twice a day.

It is only a theory that this germicide may follow the tuberculosis bacillus into the capillary bronchi, and it does not seem improbable that were those predisposed to phthisis to use this germicide before the bacillus had made such terrible inroads into the structure of the lungs and all organs it selects, this drug might prove of considerable benefit. Its value consists in the facility of its subdivision by a hand atomizer, in germicidal and analgesic properties.

A New Laxative.—Jatropha, a plant native to Northern Mexico, has recently been recommended in this country by Dr. A. Noon as a laxative. It is comparatively tasteless, resembling in flavor the sweet potato, and is prompt and efficacious as a hydro-cathartic in large doses and a laxative in small doses. These properties have been abundantly proven in Mexico where it is a household remedy among the natives. A fluid extract has been prepared by Parke, Davis & Co., of Detroit, Mich. The dose will vary from one-half to two drams, according to the requirements of the patient.—*Ther. Analyst.*

BOOK REVIEW.

FLINT'S PHYSIOLOGY.

This, the fourth edition of this great work, has been entirely rewritten so as to remedy some of the defects of the third (1888) edition. The historical references of the former editions have been curtailed, and unsettled and disputed questions are as far as practicable, undiscussed. Recent advances in minute anatomy forms an essential part of physiology, and is taken advantage of in the work. As expected, the author brings his great experience as a teacher and a writer to bear upon the book.

In form and topography there is also a change; one new plate and sixty-one new figures have been introduced. Two plates and sixty-three old figures have been taken out. The defects in the old illustrations have been remedied, and as near as possible brought up to the most critical teachings of the day. The type is of sufficient size and the mechanical execution of the book in advance of the average. It is published by D. Appleton & Co., of New York. T. J. C.

STATISTICS OF YELLOW FEVER VACCINATIONS.—We are indebted to the author, Dr. Domingos Freire, for a copy of his brochure, "*Statistique des Vaccinations au Moyen des Cultures du Microbe attenue de la Fievre Jaune pendant l'epidemic de* 1888–89." The first part of the report is devoted to a consideration of the results achieved in different localities with the preventive inoculations of attenuated cultivations of the yellow fever microbe, which Dr. Freire claims to have isolated, and the second part is a generalization of these results. From the many letters and testimonials, it would seem that a certain advance has been made upon the result of the earlier experiments in this direction, and this advance is so marked that we think that we may reasonably accept Dr. Freire's discovery as one backed by very strong evidence of its value. We must certainly hope that such is the case at any rate, and wish him the full meed of success in his self-sacrificing and arduous efforts to ameliorate the horrors of the "Yellow Terror."—*St. Louis Med. and Surg. Jour.*

DIARRHŒA IN INFANTS.—At the Paris Maternity, Madame Henry, the midwife-in-chief, gives a mixed diet to infants (*Med. and Surg. Reporter*) when a mother is unable to furnish enough milk to her child. If diarrhœa appears, she prescribes the following mixture:

℞.—Rum, ... 3 teaspoonfuls.
Water, ... 1 tumblerful. M.

Sig. Give three or four teaspoonfuls in twenty-four hours. If this is not sufficient, the following prescription is used:

℞.—Napthol B, ... gr. j.
Water, ... ʒ jx. M.

Sig. Two or three teaspoonfuls in twenty-four hours.

THE ABORTIVE TREATMENT OF HERPES.—M. Leloir employs the following solutions (*Med. News*) in the abortive treatment of herpes:

℞.—Resorcine, ... ʒss.
Hydrochlorate of cocaine, gr. vijss—xxx.
Tannic acid, ... ʒjss.
Alcohol (90 per cent.), ... ʒ iij. M.

Or

℞—Hydrochlorate of cocaine, . . gr. xv.
Extract of cannabis indica, . . . ʒ ijss.
Spirit of peppermint, ... *m*.cl.
Alcohol (90 per cent.) . . . . . ʒ iij. M.

INJECTION FOR FISTULA:

℞.—Camphor, ... ʒj.
Salol, ... ʒ ss.
Ether, ... ʒj M.

ASEPSIS OF THE SICK ROOM.—Sevestre advises the use of the following solution, which may be sprayed or evaporated by boiling:

℞—Thymic acid, ... grammes, 5
Carbolic acid, ... " 10
Alcohol, ... " 100
Water, ... " 885

SALOL IN TONSILLITIS.—Salol has proved of much service in the treatment of tonsillitis and pharyngitis, when given in doses of 60 grains *per diem*. It is equally serviceable in scarlatinal angina and suppurative tonsillitis. On account of its insolubility it is prescribed suspended in mucilage, with directions to shake well before using. The diet should be exclusively milk. Under this treatment the dysphagia rapidly disappears, the fever subsides and the progress of the case is satisfactory. In exceptional cases the dose may be increased to 90 grs. *per diem*.—*Dr. Cougenheim, in Formulary.*

GLEET.—Ricord, the late celebrated Paris physician, used to say to his students: "Gentlemen, if I am to go to—well, the bad place, I know what my punishment will be. I shall have a lot of fellows with the gleet standing round me with their lamentations, their importunities and their prayers to make them well." The remark of this distinguished man indicates the intractable character of gleet. Experience has taught many of us to regard gleet as a very troublesome disease.—*Kansas City Medical Record.*

USES FOR ICHTHYOL.—This drug has been used with asserted success in rosacea, urticaria, purpura, erythema nervosum, chronic rheumatism, arthritis, incipient whitlow, pernio, para-, peri- and chronic metritis, ovarian and tubal inflammation and pruritus. Generally it was given internally, and also applied locally.—*Provinc. Med. Jour.*

LANGHORNE (*Lancet*) reports a case of intussusception, of nine days duration, successfully treated by inflation. The gut could be felt in the rectum. Inflation was performed with an ordinary pair of bellows, the gut slipping back quite suddenly. The patient was nine months of age.

DEPARTMENT OF

GENERAL SURGERY.

EDITED BY

W. B. ROGERS, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

CELLULITIS WITH RESULTING STRICTURE OF RECTUM COLOTOMY — RECOVERY.

GEO. E. PETTY, M. D., DES ARC, ARKANSAS.

Mrs. J. C., age 24, white, multipara, confined in December last, remained in bed one week, did not do well after getting up, and in January and February was quite feeble, had sensation of pulsation and weight in pulse, low but almost constant fever, with frequent remissions and sweating continuing through a period of three or four weeks, during which time feet were always cold and had great difficulty in keeping bowels open, and finally after several days' constipation a considerable quantity of bloody pus was discharged per rectum; from this time her condition improved somewhat, but the difficulty in keeping bowels open continued. I was called on March 11, when the above history was obtained, with the additional statement that her bowels had not been evacuated then in fourteen days. I found her quite feeble, feverish, vomiting stercoraceous matter, had taken no nourishment for a week, but had been fed on the standard cathartics; abdomen was considerably distended, with a doughy feel.

After kneading the abdomen thoroughly I endeavored to flood the colon with warm water by placing my patient in the genu-pectoral position, but found that the rectum would not retain more than a syringeful of fluid, whereupon a digital examination readily revealed the nature of the difficulty. Passing my finger up the rectum about two inches from the anus, a dense, unyielding mass was encountered, into which an opening about one-quarter of an inch in diameter could be found, but the tissues forming the obstruction were so firm

and unyielding that the opening could not be enlarged with the finger. By vaginal examination the pelvic roof was found to be literally "as hard as a board," the uterus immovable. Being nine miles from my office and unprepared to meet such an emergency, I gave full dose of morphine, to be repeated if necessary, to procure rest and check vomiting, and returned to my office to equip myself for the occasion.

Before returning on the following morning I determined to forcibly dilate the stricture if possible, but in event of failure in that, to do posterior linear rectotomy, provided I could determine that the stricture did not extend too high up the bowel. On arriving I found no material change in my patient's condition, except that she was somewhat refreshed by the sleep induced by the morphia. Having, by previous arrangement had my patient thoroughly quininized, I administered Squibbs' chloroform and forcibly dilated the sphincter muscles, after which a blunt probe was passed through the small opening in the stricture. This was followed by a Knott's uterine dilator, as nothing larger would enter. After enlarging the opening with this a larger instrument was passed, and dilation to the extent of two inches effected. This allowed rectal bougies to pass freely three or four inches higher up, where they were arrested by a dense band through which no opening could be found—could not guide an instrument either by sight or touch—therefore ceased to make further efforts at dilation. After my patient had recovered from the anæsthetic I again placed her in the knee-chest position, and endeavored to flood her colon, but before a half pint of water was injected it began to overflow. After allowing this to escape an ounce of glycerine was injected with a long-nozzeled syringe as high up the bowels as an instrument would pass. In a few minutes this brought away a small watery action, accompanied by a large amount of glairy mucus, the characteristic discharge of a rectal stricture, but no fecal matter. This satisfied me that I would not be able to empty the bowels by the anus, and feeling that colotomy was the only alternative I acquainted the patient's husband with my determination on that point. He rejected the operation, and I left him to consider the matter. Returning on the follow-

ing day I found my patient weaker, and suffering more from nausea and vomiting. I determined to lay the matter before her in person; and after having the dangers and inconveniences explained to her she readily accepted the operation, saying she could only live a short time in her present condition. I had her brought to Des Arc on the following morning, and at 2 P.M., February 14th, assisted by Dr. J. M. Dorris and students Bough and Richmond, proceeded to do Amussatt's operation or left lumbar colotomy, making an incision about four inches in length in the left lumbar region, extending from above downward and backward, each structure being recognized and divided on a director as it was reached. After incising the quadratus lumborum the lower border of the kidney was easily recognized, and the colon found in its normal position, much distended, but obscured by its covering of fat. After satisfying myself that I had found the colon, it was transfixed with needles carrying silk sutures and drawn well up into the wound, and incised to the extent of one and one-quarter inches longitudinally. A considerable amount of fecal matter was now removed with a scoop, after which the edges of the colon were stitched to the integument, and the ends of the incision closed by deep sutures. Patient stood the operation well, and revived nicely from the anæsthetic.

At time of operation temperature was 100°, pulse 120. At 9 A.M. on the following day pulse had run up to 130, but temperature had fallen to 94°, notwithstanding quinine and whisky had been freely administered during the night. Digitalis and strychnia were added to other stimulants, and at 4 P.M. temperature had risen to 95°, at which time about one gallon of fecal matter was washed out of bowels with very warm water. By 9 A.M. on following day temperature had risen to 98°, and bowels were then completely emptied. Then placing my patient in such a position that the colon below the site of operation was distended by water, I passed a dilator through the wound down the bowel, occasionally separating its blades, until it was found to have entered a place where its blades were stoutly resisted. At this point they were slowly and carefully opened, and the instrument

withdrawn. Shortly after this a small amount of fecal matter was discharged from anus, and from this time patient emptied bowels through the natural channel, the stricture being kept open by frequent passage of rectal bougie. After being allowed to remain open three weeks the fecal fistula was closed by a subsequent operation, and one month later had completely healed.

ULCERS AND THEIR TREATMENT.

Read before Hot Springs Medical Society,

BY M. G. THOMPSON, M.D., HOT SPRINGS, ARK.

Mr. President and Gentlemen of the Society:

I had difficulty in deciding on a subject that I thought would please and interest you all alike, for we differ in age, in experience, in education, in our power of observing; and, as a necessary consequence, will differ in our practice. This is my excuse, then, for selecting so commonplace a subject as ulcers and their treatment. A subject on which we have all had the most abundant experience, as to their variety and the difficulty of treatment. Patients representing every nationality and from every quarter of the globe, many of them after being treated by the most eminent men of our profession, come here as a last resort.

I have no new classification, no new pathology, and no very startling suggestions as to practice, yet the subject is not void of interest, for we can all recall many cases with most brilliant results, where others, eminent in the profession, have failed.

There is such an abundance of literature on this subject, and the treatment and classification is so well expressed in the text-books, that I will not trespass on your time with discussion of these points, but prefer to have this "an experience" meeting, reciting a few cases of interest, and discussing the relative value of treatment.

I was talking to an experienced medical man (who has retired from practice) recently about ulcers, and he said: "Sir, I was taught to define an ulcer to be a sore with no tendency to heal. It is a slumbering volcano, that is a constitu-

tional trouble, and this the local manifestation. All that is necessary is to destroy the unhealthy granulations by caustics and stimulating applications; the proper use of the bandage when necessary, treating the constitution with proper remedies for syphilis, malaria, scrofula, etc., etc., as indicated, and my experience bears me out in this that you will have no trouble."

Fortunate indeed is the medical man who can so easily apply in detail his principles of practice, for we have all met cases that were a source of perplexity, and taxed our energies from early morn to the wee hours of the night.

I will report a few cases to illustrate treatment:

A young man twenty-five or thirty years of age, general appearance moderately good, presented himself for treatment saying he had a chancroid which had extended to the groin, which had resisted treatment for ten or twelve months, though he had employed many medical men. On examination I found a granulating ulcer eight or ten inches in length, and from one to three inches in width, no history of syphilis, nor could I find any constitutional cause why this ulcer would not heal.

From examining his prescriptions which he had preserved, and from what he could tell me about the case, I found he had undergone the usual routine treatment, both constitutional and local. He had the ulcer packed with cotton and had his own idea about treatment. After being perplexed over the case a few days, I decided there was nothing peculiar about the ulcer. The young man had had nothing to do but put in all his time night and day on this sore, and regardless of the reputation and ability of his doctors, he discharged them when they did not comply with his ideas of treatment, and had thus put in ten or twelve months and over $1500 with no benefit. I gained his confidence and did not allow him to dress the ulcer, but gave it my personal attention after his daily bath, and in a few weeks had him quite well. His whole trouble had been kept up by too frequent dressings, breaking up granulations, and too free and frequent applications of caustic.

Case II. An old gentleman who had tertiary syphilitic ulcers which had resisted treatment for several years, had been sent to the seaside, had visited Europe, had taken large quantities of mercury and potash under the advice of many different medical men, and had been treated by others who diagnosed no syphilis because treatment did not verify syphilitic diagnosis. He had visited Hot Springs a year before and been greatly benefited, but did not stay long enough to get well. He assured me that he could and would take two water baths, and an iodine vapor bath daily—one water bath at 7 A.M. and at 2 P.M. and the iodine vapor at 8 A.M., staying in each thirty minutes. He took one ounce of iodide of potash daily. He continued this treatment for sixty days, though I often protested that he would kill himself. He had no trouble, except for a few hours in the afternoon was unable to walk from the effects of the potash. He went home cured of his ulcers at the expiration of sixty days of this treatment.

In looking over the work of Dr. Hutchinson on the treatment of ulcers, I noticed that he often kept the patient in the bath all day and part of the night with the best results.

In the consideration of this case, I attribute the cure to the medical or other properties of the hot water, to the length of time in the bath, which necessitated the drinking large quantities of water, thus rapidly changing all the fluids of the body. As to the amount of the potash I do not think it was all absorbed, and a smaller quantity would have accomplished the same result.

Cases III and IV. Drs. Gaines and Barry kindly assisted me in the treatment of two cases of lupus erythematosus, which had resisted treatment for years and we had no trouble, and the result was very gratifying.

When I think of your experience here, I am not inclined to occupy your time with the recitation of cases, but will give you some of my conclusions in regard to the treatment.

First, there are frequently undue prejudices on the part of the patient and also on the part of the physician, against the resort to surgical procedure, thus allowing more destruction of tissue than necessary, or permitting the ulcer to become

chronic when it might be prevented by the free use of the curette, removing all the pockets of pus and points of infection, and then cauterizing and dressing antiseptically, and when this plan fails, as a rule it is due to neglect of proper attention to details, such as making the patient take a hot bath, change all his clothing—the shaving and washing the parts with soap—aseptic dressings, instruments, hands, etc., and after proper attention to these details, *subsequent* dressing may cause failure. To illustrate: I assisted a doctor in operating on an ulcer of the genitals which had resisted treatment for many months, and we had observed all the rules, when on the third day I visited the doctor's office and found him dressing the wound, and so well did he have it in his head to destroy every point of infection that he washed and scrubbed off every new granulation and re-cauterized, when fortunately for the patient it hurt him so badly that he lost confidence in doctors and decided not to see any more, but to let his ulcer take its course, and in two weeks was quite well.

Gentlemen, I think it more important to study well the established rules and principles of practice and apply them in detail in each individual case, than expect great things from new medication. I have tried recently the new substitutes for iodoform and have been greatly disappointed.

There can be no question of the utility of the bandage in the treatment of certain ulcers, but who among you has not seen the leg unnecessarily and permanently injured by its use? when a little surgical operation as I've just described, or a little skin-grafting would have prevented. The principles of skin-grafting are so well established and so simple that if you comply with the rules and fail to succeed with the graft, the ulcer will heal in a few days by cicatrization with almost as satisfactory result. The plan (after properly preparing the ulcer) of making incisions on either side and sliding the skin so as to roof the ulcer, is very simple and the result very gratifying, yet still how many continue to use the bandage and unnecessarily injure the limb.

And this point in operating is often neglected, that is, laying open the periosteum and allowing it to drain, for all ulcers

of any extent on the leg inflame the periosteum, though they may not *seem* to do so.

In conclusion I would insist that all ulcers that resist treatment for any length of time should have surgical treatment, unless there is something to contraindicate it, such as location, malignancy, etc.

Abortive Treatment of Gonorrhœa.—Two papers were read upon this subject at the Society of Practical Medicine in Paris on the 13th of February, 1890.

In that by Dr. Malecot the treatment by injections of nitrate of silver was discussed. He regards the prejudice against the employment of silver as unfounded, if it is properly applied. Certainly the strong solutions are dangerous, especially if they are used several days in succession. They may provoke discharge of blood, and their too energetic action may compromise the subsequent elasticity of the canal. Furthermore, with the piston syringe the sphincter may be forced and the caustic be uselessly injected into the bladder. He therefore recommends the olive bulb instillator, which is introduced as far as the muscular sphincter. The sensation of special resistance here felt serves as an indication that the instrument has gone far enough.

The patient first urinates, then the canal is to be washed out with a feeble boric acid solution, and then the instillation made—the first day in strength of 1 to 50, and the following days 1 to 100 or 1 to 150, the solution being retained in the urethra for two or three minutes. The irritant action is only of short duration, and affects only the epithelial layer of the mucous membrane. In the intervals between the acts of urination it is recommended to wash out the urethra with some antiseptic solution—the permanganate of potash, resorcin, or bichloride, the latter not stronger than 1 to 10,000 or 1 to 20,000.

Dr. Malecot has obtained excellent results from the salicylate of mercury in strength of 5 centigrammes to 100 grammes of water, at a temperature of 30° to 40° C. It is a strong antiseptic without being painful. Internal treatment is not wholly neglected, sandal oil, copaiva, etc., being given in the

belief that they undergo a change in the economy by means of which they become germicidal. Oppenheimer has shown that urine passed after the administration of thirty grains of copaiba sterilized silk threads charged with microbes. He has also followed Dreyfous in the employment of salol in daily doses of six grammes with the same object in view.

Following out this plan, an abortion of a recent gonorrhœa often takes place and without danger. Only violent inflammation of the urethra should cause one to suspend the treatment. In some cases, without known cause, the method fails.

In the second paper, by Dr. Picard (*Journal de med. de Paris*, March 9, 1890), the question as to the efficacy and harmlessness of abortive injections of the nitrate of silver are answered in the affirmative. If we examine into the action of a sufficiently concentrated solution of nitrate of silver we see that it acts upon the mucous membrane of the urethra just as the gonorrheal virus acts, causing death and desquamation of the superficial epithelium. The difference between their actions and that which explains the efficacy of the treatment is the rapidity with which the silver works, destroying the epithelium at once, while the virus requires several days to effect the same result. The success of the treatment therefore depends upon the promptness of its application. It should be made when the first symptoms appear—that is to say, before the appearance of pus. In practice it is at the time that the patient feels an itching sensation in the fossa navicularis, and perhaps notices a clear drop at the meatus, that the treatment must be instituted. A red meatus, with the lips swollen and everted, turgidity of the glans, and great pain, furnish contraindications to the employment of the abortive method. If these parts are normal and the pus is not too abundant and thick, the silver may still be used. The solution he recommends is that of 1 in 25 or one in 30. More concentrated it becomes caustic, and the solid stick is not to be thought of, because it leaves a cicatricial stricture. The Langlebert syringe, throwing a recurrent stream, is recommended, but the author gives preference to the ordinary injection syringe. The pain occasioned is unusually moder-

ate. Twenty-four or thirty-six hours after the first injection, if the discharge persists, a second is authorized, provided the parts are neither red nor painful.—*Journal of Cutaneous and Genito-urinary Diseases.*

DEPARTMENT OF

GYNECOLOGY.

EDITED BY

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To whom all matter pertaining to this Department should be addressed.

OBSTETRICS AND GYNECOLOGY.

E. S. M'KEE, M.D., CINCINNATI.

Dr. R. B. Hall of Cincinnati presented a paper on Intra-Pelvic Surgery for the Relief of Inflammatory Diseases. This was the report of a year's work, 18 cases in all, of which number all but 3 had pus. These operations are among the most trying in pelvic surgery, for the gravity and extent of the complications in any case cannot be estimated before opening the abdomen. He could not make this report unmarred by a single death, but he had the cases where he could give them careful after treatment. As a rule they do not require long treatment, but need careful attention for a few days at first. He thought that all cases of prolonged chronic salpingitis should have a lengthy and systematic course of treatment. In a number of the reported cases it was impossible to separate the adhesions without bursting the pus sac. When this occurred, and in cases where there was much bleeding, the abdominal cavity was washed out. He has constantly employed this free washing of the abdominal cavity when necessary for three years. The heat relieves the shock, and in no case has it caused bad symptoms; the washing is continued until the water returns clear. Although all the cases recovered, many of them would not submit to an operation until as a *dernier resort.* The doctor had seen four cases in consultation and advised an operation, which

was refused by the physicians in charge and the friends of the patients. These four cases died within a few weeks from peritonitis with all indications of ruptured pus tubes. Three of these were proven beyond doubt by autopsy. There is danger in the conservative plan, where there is pus in the pelvis, as well as in operation.

Pyosalpynx, Intestinal Laceration, Omental Grafts, was the subject of a paper before the Kentucky State Medical Society by Dr. J. D. Carpenter of Stanford. Both cases were successful. This he thought was due to free purgation and soap and hot water before and after operation, and the thorough evacuation and drainage of pus cavity and abdomen, removal of offending masses, the most complete irrigation with hot distilled waters, subsequent asepsis and rest, the assiduous watchfulness and attention of nurses and specialists, the conspicuous absence of meddlesome nurses and young internes, the withholding of chemical antiseptics from the abdomen, and the avoidance of dirty antisepsis and asepsis seen so often in the general hospitals, and the total prohibition of opiates. The best results in abdominal surgery are obtained in private hospitals and in rooms rendered thoroughly clean and aseptic before the operation, and by specialists in abdominal surgery. The best medium of success is simple asepsis.

Some of the Common Errors in Gynecological Practice and the Ills Resulting From Them, was the subject of a paper by Dr. David Barrow of Lexington. He called attention to the superiority of the bimanual examination over the speculum and the sound. Pessaries as generally used do much harm. Tents are dangerous and unjustifiable. The curette in the hands of the inexperienced is a means of much danger. The repair of the lacerated cervix he thought was done too frequently. In inflamed, adherent and degenerated tubes and ovaries he did not favor temporizing measures, but recommended that the abdomen be opened for all adhesions and the offending organs removed. In skilled hands operation by abdominal section, which gives permanent cures, involves even less immediate danger to the patient than the so-called expectant and conservative treatment.

Simplification of Cæsarian section is an object well sought

after, as simplicity, not at the expense of security, should always be an aim. Futsch of Breslau, in the *Centralblatt fur Gynekologie*, xiii, 23, 1889, has on therapeutic grounds and to save time, an object always in capital operations, omitted the sero-serous suture of Sanger in the Cæsarian section. He sutures now as was formerly the custom, with sutures simply forced through the entire uterus wall. The needle is made to enter the peritoneal surface of the uterus about one centimetre from the edge of the wound, and has its exit always about 0.5–0.75 centimetres from the border of the wound. The decidua is also fastened with it. The sutures must be tied very securely, and must not be more than one centimetre apart. In two cases which he operated after this manner the results were good. In one case silk and sublimate catgut sutures were alternated; in another only the latter.

BOOK REVIEW.

DISEASES OF WOMEN AND ABDOMINAL SURGERY. By Lawson Tait, F.R.C.S., Edinburg, England, L.L.D., M.D. (Honoris causa) of the University of New York, Union University of Albany, and the College of Physicians and Surgeons of St. Louis, Professor of Gynecology in Queen's College, Birmingham; Surgeon to the Birmingham and Midland Hospital for Women, etc., etc., etc. Vol. I, Philadelphia; Lee Bros. & Co., 1889.

I have no sympathy with the idea that it is presumption in the lesser workers in medicine or any field of labor to criticise the masters in the same field. No man is so eminent but that his work must be brought by lesser men to the bar of their individual judgments and approved or condemned as that trial may decide.

Even the casual reader sees that Mr. Tait's book is not a treatise on female diseases, nor in any way a text-book of these diseases. It is a history of Tait's work and an argument for Tait's methods and theories. Those who expected a compilation or a digest of authorities or a thorough and careful treatise on these diseases, are disappointed and properly so; Mr. Tait is by nature unfitted for such a task. He is of such individuality that all emanating from him must be original with him, or bear the impress of his personality. He may adapt, but never adopt, another's method, and in a majority of cases the method will be his own.

Men of positive opinions are not men of judicial minds. Like most men of genius with whose character I am familiar, Mr. Tait is an egotist; seeing in magnified proportions his own work, and viewing others' work in the diminished importance which the perspective of genius gives to work not its own. So I think it may be safely said of Mr. Tait, that he is not an entirely fair man toward other medical men in the same specialty. As an example of this, let me present the single fact that nowhere in his article on treatment of vesico-vaginal fistula, does he write even the name of J. Marion Sims. Tait's method of repairing this lesion may be better; I have never seen it done. Those skilled in this specialty know better than I, but certainly to Sims is due the credit of making a practical success of the treatment of this disease in America. In this, as in repair of the perineum, Tait opposes denudation as waste of tissue, suggesting in both the flap-splitting operations as more conservative and more effective, making for its application in the latter case the thoroughly immodest and thoroughly characteristic claim that his operation alone "restores the perineum to its original form and dimensions, and makes the patient as good as new, while all denudation operations really make no attempt to restore the perineum."

Indeed, much of Tait's work is devoted to condemnation of practice that in the hands of others has done undoubted good. He may be forgiven his anathema against mechanical gynecology, since an entirely respectable party of gynecologists here and abroad has decided the ball, the lever and the stem to be of very limited application. Most conservative gynecologists will agree with him when he urges great circumspection in the use of the uterine sound. Where he says of the microscope in malignant pathology that "it has not helped us in the least in the prognosis (and diagnosis of course) of tumors of the pelvis, abdomen and breast," we hope Mr. Tait is wrong. When he tells us that complete removal of the uterus for cancer meets his strong disapproval, we are surprised to find him resorting to the very ancient and very unfair argument that "the few cases in which the disease does not recur, are clearly errors of diagnosis." More-

over, he gives no place to the fact that when there is recurrence, it is generally in a form that gives the woman an easier taking off. When he condemns the plastic repair of hypospadias; when he says that nothing more useless than Emmet's operation has ever been introduced into surgical practice; when electrolysis in the treatment of myomata, so successfully applied by Apololi, the Keiths, Martin and others, is briefly dismissed as unproven, and where he finds no good in antisepsis, we must insist that Mr. Tait is not a safe teacher and may claim to be authoritatively heard only of those matters in which he has himself reached such marvellous success, and not as a judge of the work of others.

I know of no work from which such clear and positive ideas may be obtained. The classification of myomata, of which Mr. Tait has had enormous experience, into the soft edematous and the multinodular, and the description of the varieties, are simple and attractive. A large amount of light is cast upon the dark subject of ectopic gestation by Tait's researches, and its consideration much simplified by his classification and pathology of it. The author practically knows but one form of ectopic pregnancy, that is, tubal, and the pathology is based on the theory ably argued that fecundation normally takes place only in the uterine cavity—the ciliated epithelium of the tubes at once facilitating the wombward passage of the ovum and inhibiting the entrance within the tubes of the spermatozoa. By desquamative salpingitis this ciliated epithelium is lost, and the spermatozoa meeting no resistance enters the tube where it finds the ovum becalmed for lack of the wombward breeze of the cilia, and there impregnates it. If this occur in the uterine part of the tube it has been uniformly fatal before the fifth month. The usual location is the free part of the tube, and here it involves rupture before the 14th, or quite likely before the 12th week of its progress—rupture either into the peritoneum, uniformly fatal unless operated at once, or between the folds of the broad ligament, extra-peritoneal, which form alone may go to maturity. In this form we may be surprised to find Mr. Tait counseling as in other extra-peritoneal hematoceles, that they be left alone till operation is otherwise indicated.

Some points worthy of thought I shall mention only:

The existence not very infrequently, of a condition which Mr. Tait thinks is utero-peritoneal fistula, by which the sound when introduced may pass to the hilt without application of force and without any harm resulting. This I have seen occur more than once, and with less shock subsequently to the patient than immediately to the operator and observers.

That ovulation is not related causally to menstruation. Mr. Tait disclaims a tubal theory of menstruation, for which, however, he adduces argument, and seems rather to attribute the flow to central influence conveyed through a certain nerve to be found in the broad ligament, and which he now carefully includes in the appendages removed by operation.

That puerperal fever, in the majority of cases, he thinks is due to some local antecedent lesion, as pus tubes burst during labor.

That sexual instinct is not situated in ovaries of women (hence not abated by their removal) nor in testicles of men, and this opinion in the face of the known effect of castration as seen in geldings, oxen and eunuchs.

From a less eminent gynecologist, the statement that he would operate upon a vesico-vaginal fistula through a Ferguson's cylindrical glass speculum, would cause a smile, and we may readily believe his remark that "he finds it easier to apply the stitches by the use of the finger tips without the speculum."

Let me place two assertions of ignorance strongly to his credit: That he cannot distinguish the corpus luteum of gestation from the corpus luteum of menstruation, and that he cannot diagnose ectopic pregnancy before rupture.

A statement of value coming from a man of such pronounced unbelief in drugs is, that chlorate of potash in 5 gr. doses t. i. d. with ergot during the flow, will relieve more than 75 per cent. of cases of subinvolution.

Two of the author's aphorisms are, "Incomplete operations are the opprobrium of abdominal surgery, and operators ought to be more discredited by them than by anything else," and "The whole of my experience in every department of abdominal surgery is one continuous outcry against delay."

A few years ago, nor is it yet gone, among surgeons and even medical men, there was a syphilomania. A question never omitted in the clinic was "Have you had syphilis?" If it were answered in the affirmative, the answer was received as explaining the etiology of whatever ailment existed. If the patient denied infection it was declared "omnia syphilitica mendax," and the syphilis received the credit just the same. I have not been slow to appreciate the evil of this poison, but I have no sympathy with the effort to make it so universally at fault. So in my limited experience I should still be so bold as to doubt the enormous and enormously fearful consequences attributed to gonorrhœa by Mr. Tait, charging it as he does, with ovaritis, salpingitis, abortion, sterility, puerperal fever, and perhaps tuberculosis.

That the tendency is to overestimate the importance of gonorrhœa in the production of ovaritis and kindred inflammations, I have but one original fact to present, and that is, that among 800 Indian women recently under my charge, all of whom were infected with gonorrhœa or had the opportunity of it, I saw fewer cases of ovaritis than among a score of white women at the same time under my charge, and the majority of whom were unquestionably virginal.

Still, it would indeed be well if Mr. Tait could effect a moral reform by inculcation of the principle to which he is inclined "that it it is unjustifiable for a man who has ever suffered from gonorrhœa to enter the marriage state at all." Or, failing of his reform to secure immunity in the way indicated in the rather radical statement that he is "quite satisfied venereal diseases might be entirely stamped out by more scrupulous attention to the toilet of the genitals."

In conclusion, I may say it is refreshing in these days of medical agnosticism to read the positive work and dogmatic opinions of such men as Mr. Tait, and from no medical book I have read in recent months, have I received so many clear and decided ideas.

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DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

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NOTES ON THE USE OF BICHLORIDE MERCURY AND FLUORESCIEN IN OPHTHALMIC PRACTICE.*

ROBERT L. RANDOLPH, M.D., BALTIMORE.

At the eye clinics of the Johns Hopkins Hospital and the Presbyterian Eye and Ear Charity Hospital, no agent has given us the satisfaction that the bichloride of mercury has given in the treatment of corneal inflammation. Nearly three years ago we commenced its use at the Presbyterian Eye and Ear Hospital, in the strength of 1:6000 or 1:8000 in all forms of keratitis. I generally prescribe 1-12 or 1-16 gr. of the bichloride of mercury to an ounce of water. This solution is to be instilled into the eye every three or four hours during the day, and each time it should be allowed to remain a few moments in the conjunctival *cul de sac.* Both in the superficial and interstitial varieties of keratitis its effects are positive for good, and when used in the strength stated above I have never found it irritating. In all forms of conjunctivitis, more particularly that form frequently of scrofulous origin, namely conjunctivitis phlyctænulosa, there is no better remedy than a mild solution of corrosive sublimate. In conjunctivitis due to infection it is an admirable agent. No doubt most of the inflammation of the cornea and conjunctiva are of microbic origin, and hence the good results which follow the use of the bichloride of mercury solution are to be attributed to the germicidal action which this solution exercises upon the organisms present in the conjunctival *cul de sac.* And even if a solution of this strength fails to destroy the organisms, as recent experiments would seem to indicate, it has not yet been proven that such a solution does not exercise a restraining influence upon the micro-

* Practice, May, 1890.

organisms and prevent their rapid increase in the disease areas. And apart from the antiseptic action of the agent, I am quite willing to attribute to the latter some local therapeutic effect in keratitis. Certain it is that a solution of 1 : 8000 corrosive sublimate is the regular routine treatment for keratitis in both the eye clinics to which I am surgeon, and there is no remedy which has proven so efficient.

Again I have found these mild solutions of corrosive sublimate valuable in the treatment of suppurative inflammations of the middle ear. It is here used in the same strength as that employed in eye affections. The solution is modified, though, by the addition of a few grains of tartaric acid, and the reason the acid is added is to prevent the precipitation of any of the sublimate from the solution. When a sublimate solution is poured into a cavity— like the external auditory canal for example—full of pus, or when such a solution comes in contact with pus, the albuminate of mercury is precipitated, the solution loses some of its bichloride of mercury, and consequently the germicidal value of the solution is proportionately lessened. The amount of tartaric acid used is five or ten grains to an ounce of the sublimate solution of the strength of 1 : 8000. The patient is required to thoroughly cleanse the ear and then fill the latter with the acid sublimate solution and allow it to remain in the ear for at least fifteen minutes. This method of treating otorrhœa has been a favorite one for the past year in both clinics, and many cases where the old remedies, such as boracic acid, had failed, were speedily healed by the method indicated. Whenever such a solution gives pain by burning I direct that it be diluted.

For the past three months I have been experimenting with fluorescien as a means of diagnosing lesions of the cornea. Fluorescien is a red powder, soluble in water, and belongs to that class of substances which are found as products of coal-tar distillation. I use the substance in the strength of 10 grains of the powder to the ounce of water, to which is added 15 grains of the bicarbonate of soda. This solution, when dropped upon a portion of the cornea which is denuded of its epithelium, colors the diseased part a deep green, leaving

the healthy parts unchanged. (The results of my experiments were published in the last number of the *Johns Hopkins Hospital Bulletin.*)

Ulcers and excoriations of the cornea so small that it is impossible to detect them by diffuse daylight, and which are even difficult to recognize by oblique illumination with a strong magnifying lens, are brought out with perfect distinctness, standing out as deep-green points, while the normal cornea around remains unchanged. Such a means of diagnosing corneal inflammations should be useful to the general practitioner. Too often the question arises as to whether we have a simple conjunctivitis or whether the more important structures of the cornea are involved; and inasmuch as several of our best remedies for conjunctivitis would intensify a corneal affection, if such be present, it is well to know exactly with which of the two troubles we are dealing. Two or three drops of the fluorescien solution will reveal the whole trouble; and furthermore, if we get no green discoloration we may be certain that the cornea at least is not involved. I use the agent daily and find it a great help in establishing the diagnosis of corneal affections, and as far as my experience goes it appears to be absolutely reliable. The solution is not irritating and the coloration passes away in from half an hour to two or three hours. I will add that this method of detecting lesions of the cornea was first employed by Dr. Thomello, of Friedland in Germany. His paper appeared in the November and December numbers of *Hischberg's Centralblatte fur Praktische Augenheilkunde.*

Prescription used for keratitis: ℞ Hydrarg. bichlorid, gr. 1-12 or 1-16; M. aq. distil, ʒj; Sig.—A few drops in eyes every 4 hours.

Prescription for suppurative otitis: ℞ Hydrarg. bichlorid, gr. 1-4 or 1-6; acid tartar, grs. v; M. aq. ʒiij; Sig.—Use as directed.

TREATMENT OF DEAFNESS OF OLD AGE.—Sapolini has successfully treated sixty-two cases of deafness of old age by mopping the membrana tympani with a week oleaginous solution of phosphorus. He claims that this treatment diminishes the capacity of the membrane, increases the circulation and improves the hearing.—*Ex.*

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Memphis, Tenn.

ORKNEY SPRINGS.—We would call special attention to this summer health resort, and commend it to our professional and other friends who desire to rid themselves of malaria by seeking a healthful climate and alterative mineral waters.

SPECIALISTS.—The *Cincinnati Lancet*, after recounting some of the medical giants who made Cincinnati famous, says: "Today Cincinnati is overcrowded with college professors of innumerable types—Surgeons who prescribe for the belly-ache; oculists who examine the rectum for hæmorrhoids; gynæcologists who play at obsteterics and support lacerated perineums; throat specialists who attend cases of measles and scarlatina in hopes of turning an honest penny—a motley crew, whose talents may be as great as is claimed by their friends, but whose light is certainly hid under a bushel, if we are to judge by the rays that are never apparent in current medical literature."

Cincinnati is not different from other cities in this respect. Specialists must seek for their bread, and finding their field too narrow they are enticed to other branches of the profession. A medical neighbor of mine fixes these matters quite differently. Among the ladies he is a specialist on gynecol-

ogy; amongst the injured and wounded he is a specialist on surgery; to those afflicted with piles he makes rectal diseases a specialty; diseases of the eye and ear have received his special study; in fact he is a specialist on all classes of cases with which he comes in contact, except the umbilicus—this organ has been much neglected. Won't some good doctor take up this subject and put out his card, "Diseases of the navel a specialty?"—*Am. Med. Jour.*

PEPSIN is undoubtedly one of the most valuable digestive agents of our Materia Medica, provided a good article is used. Robinson's Lime Juice and Pepsin we can recommend as such. (See adv.)

The fact that the manufacturers of this palatable preparation use the purest and best Pepsin on the American market, and that every lot made by them is carefully tested, before offering for sale, is a guarantee to the physician that he will certainly obtain the good results he expects from Pepsin.

OPERATION FOR THE DEFORMITY OF PROMINENT EARS.—In the *Annals of Surgery*, January, 1890, Professor Keen describes a new operation which he has recently performed for the common deformity of prominent ears. The operation consisted in removing from the long axis of the posterior aspect of the auricle a long oval piece of skin, the cartilage being laid bare by the dissection. A strip of cartilage of the same length, but narrower and V-shaped on cross section, was then removed, taking great care not to cut through the skin on the opposite side. In the left ear three catgut sutures were introduced through the cartilage in addition to those in the skin. On the right side reliance was placed entirely on the sutures through the skin. The result was equally satisfactory on either side. The two operations, performed at the same time, were attended with very free bleeding, which, however, was easily controlled. The stitches were not removed until the tenth day. The result was perfectly satisfactory. *Med. News.*

THERE is no remedy better known than Tarrant's Seltzer Aperient, which can be profitably used in all conditions where alkaline medicines are indicated. In addition to its aperient antacid qualities, it is an admirable vehicle for the administration of the salicylates, lithia salts and tincture of iron. Its taste is pleasant, its action gentle; hence its desirable qualities for women and children.

TREATMENT OF STAMMERING.—"It is said that stammerers rarely, if ever, show any impediment to speech when speaking in whispers. On this fact a new method of treatment has been advocated by Dr. Coen, which is as follows: In the first ten days speaking is prohibited. This will allow rest to the voice, and constitutes the preliminary state of treatment. During the next ten days speaking is permissible in the whispering voice, and in the course of the next fifteen days the ordinary conversational tone may be gradually employed."—*Druggists' Circular and Chemical Gazette.*

THAT old and reliable firm B. J. Semmes & Co. have always on hand a full line of the best liquors in the market. Their celebrated Yannissee Whisky is well-known throughout the country. Their Culmbacher Stout is one of the best nutritive tonics that we know. They carry a full line of wines and invite a call.

BLUE RIDGE SPRINGS DYSPEPSIA WATER.—We would call special attention to this excellent mineral water, which can be had of all druggists. The analysis shows, and experience has demonstrated that it is purgative, tonic and alterative according to quantity used. J. S. Robinson is the general agent here, who will see that all who need it are supplied.

REED & CARNRICK.—The advent of summer and hot weather with the digestive troubles incidental thereto, will cause the physician to turn with confidence to the infant food preparations of Reed & Carnrick. Lacto-Preparata and Carnrick's Soluble Food are invaluable in infant feeding. Their Phospho-Caffein Comp. is one of the best sedatives and brain foods that we have.

THE

Memphis Journal of the Medical Sciences.

MEMPHIS, TENN., AUGUST, 1890.

DEPARTMENT OF

PRACTICE OF MEDICINE & THERAPEUTICS.

EDITED BY

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TYPHOID, TYPHO-MALARIAL, AND CONTINUED FEVERS.*

D. E. SMITH, M.D., MOBILE, ALA.

Typhoid fever is a continued fever, lasting usually about twenty-one days. It commences mildly, and gradually becomes more severe, until the beginning of the third week, when, if the temperature slowly declines with an improved circulation, there is a good prospect for a speedy convalescence. The characteristic lesions chiefly affect the small intestines and mesenteric glands. Peyer's patches tend to ulcerate. On the abdomen and chest there occur small pink eruptions, about the size of a pin-point or larger, which disappear on pressure. There is also a tendency to diarrhea, with gaseous distension of intestines. Generally the tongue and lips are dry; pulmonary trouble is evidenced by a cough and increased bronchial secretion; and if patient is allowed to retain the same position in bed, a tendency to hypostatic pneumonia.

The *causes* are as yet unknown, but the disease is believed to be due to a specific poison introduced from without—

* Read before Mobile County Medical Society.

either impure air or water. There is reason to believe that the latter is the far more prolific cause. The poisoning of the water may be so slight as to render it almost incredible that the disease should be propagated by it; yet, an immense mass of evidence goes to prove that fearful epidemics of this disease have been occasioned by it.

I do not think that poisonous gases can be regarded as a cause of typhoid fever to any great extent. Poisons introduced by the way of the stomach are carried there in larger bulk, and are very probably acted upon by the stomach juices, rendered more easy of absorption and enter the blood in larger quantity. It has never been demonstrated that any particular gaseous body can induce this disease. There are, however, both mineral and vegetable substances which, when introduced into the stomach, produce symptoms and morbid changes difficult to distinguish from those of enteric fever.

The diseases which are produced by the specific poison of typhoid fever differ a good deal. Some of them are so serious that life is almost inevitably destroyed; others are so trifling that a doubt exists whether there was any disease at all. Between these extremes we find every gradation, with manifold modifications and combinations. Some cases, at first trifling, will terminate fatally; other cases begin severely, and yet go on lightly. So long as the classification of disease was chiefly based on the symptoms, it was impossible to recognize the relationship between these manifold forms of disease. The lightest cases are often called, not typhoid fever, but *gastric fever*, *abdominal catarrh*, or simple continued fever.

Symptomatology. Among all the symptoms of typhoid fever, the febrile movement is the one which most attracts attention, and is the most important in determining the disease. The febrile movement has a typical course. In the well-marked simple cases, the duration of the fever is from three to four weeks. In the first week, there is a gradual increase of the body temperature. In the second week, the fever is continuous, with an increase of one or two degrees during the evening over the morning. In the third week, the varying morning and evening temperature is increased with a diminution of fever in both.

The *anatomical lesions* of typhoid fever are principally the parenchymatous degeneration of different organs. These parenchymatous changes do not occur in typhoid fever alone, nor are they in any way characteristic of it. They are found constantly in all diseases in which the temperature reaches a sufficient degree and duration. They are absent or trivial in all cases of typhoid fever in which the increase of temperature is small. In the *liver* the cells become more granular. In the higher degree of generation, the cells lose their short contour; they appear like a conglomeration of granules, and finally they lose all cohesion and break down into a formless mass of granulated detritus. Even in moderate degrees of degeneration, the scanty amount of blood in the small vessels and the uniform color of the section in which the acini can hardly be recognized, strike the naked eye. In advanced degeneration, the color varies from a grayish red to an orange or yellow. The extent of these lesions depends principally upon the height and duration of the high temperature. The secretion of bile is often markedly diminished. Its character is changed, often becoming very thin and quite colorless. The *kidneys* also undergo parenchymatous degeneration in the same way as the liver; and, like the changes of that organ, are more evident and decided in proportion to the degree and duration of the fever. The muscular tissue of the heart also undergoes degeneration, and a knowledge of this change is very important in the treatment of this disease. The *heart* may become soft, flaccid, and very weak, in the impulse. The disturbance of the heart's functions may go on to complete paralysis. The *muscles of the whole body* also undergo a change—similar to, though not to the extent of, some other fevers, especially yellow fever.

At the beginning of convalescence, when the mental faculties have been restored to their normal condition, the excessive loss of power of which the patients complain depends essentially on this change in the muscles. The hemorrhages, ulcerations, and ruptures, are the results of this muscular degeneration.

Marked disturbances in the functions of the central nervous system, which constitute such a prominent part of the lesions

in severe typhoid fever, and which are marked symptoms of this disease, are due, in great part, to some form of *degeneration of the brain substance*, and are, as a rule, also in proportion to the height and duration of the fever.

I might go on enumerating the glands, pancreas, spleen, and lymphatics, and their changes, but these may all be found mentioned in the standard works; but they may be dismissed with the simple observation that they also undergo changes in proportion to the duration and height of the fever.

Diagnosis. There is not a single symptom belonging to typhoid fever which can be considered as pathognomonic. The safest protection against error in each case is to make a thorough examination and observation of the disease. The point of greatest importance is the course of the disease—the slow beginning of the prodromic stage, the gradual increase of the fever, its long duration as a continued fever, and, finally, its slow decrease, and often a remittent form. To make our diagnosis sure, we must exclude all other diseases which may present a similar combination of symptoms.

An *acute miliary tuberculosis* is very often mistaken for typhoid fever, and, in fact I have in past years, made this mistake oftentimes. *Acute tubercular meningitis* bears strong and strikingly similar symptoms to typhoid fever. It is possible also to confound the disease with *malarial fever, puerperal fever, pyæmia, pericarditis, endocarditis, pleuritis, uræmia.* To remember that it is possible to make such mistakes, is about the surest way to avoid them. During an extensive epidemic, we would be more disposed to diagnose typhoid fever than during a time when there were no other cases. Furthermore, age has a bearing on our diagnosis. Old men and young children are not so much disposed to take it.

TYPHO-MALARIAL FEVER is a fever with a new name that has been in existence for many years; and typho-malarial is the name given by the late Dr. Woodward, of the United States Army, as denoting a disease in which both malarial and typhoid fever poisons were present at the same time—each influencing the symptoms of the other. At the meeting of the Alabama State Medical Association, 1888, I heard quite a lengthy discussion on this subject, and the majority

of those members who spoke on the subject were of the opinion that there is met with in practice throughout the State a form of fever quite different from the usual typhoid and malarial fever cases, and to these cases the name of typho-malarial was given. Dr. Baldridge of Huntsville said the symptoms were similar to typhoid fever in many respects, but differing in others. He said the period of invasion was of shorter duration, and the development more abrupt; the pulse much slower, according to temperature, than in most febrile diseases, seldom exceeding 110. The tongue is usually large, moist, and covered with a white coat. Diarrhea usually absent; bilious vomiting a frequent symptom; and skin not uniformly dry, as in typhoid fever; but soft and moist, with occasional periods of profuse perspiration. Tympanites is sometimes absent, but never occurs to any great extent. No eruption is found on the body similar to the petechial spots of typhoid fever. Hemorrhage from bowels is seldom, and epistaxis is very rare. Temperature presents a tolerably uniform course, but the variations between the morning and evening temperature is greater. The duration of this fever is generally longer than typhoid fever—more often six than three weeks.

These symptoms, as given by Dr. Baldridge, were not contradicted by other members, but there were many who thought that these symptoms could be ascribed to cases of pure typhoid fever. The Drs. Davis of Birmingham, Ala., during the same session related the history of a *post-mortem* examination made on the body of a man who had died of this disease; and as the subject of typho-malarial fever had been often discussed in the Jefferson County Medical Society, it was hoped that the pathological changes observed would decide the nature of this disease. Dr. W. E. B. Davis found all the pathognomonic changes due to cases of typhoid fever, and Dr. J. D. S. Davis found all the changes due to malarial fever. The one brother believed these cases to be of malarial origin and changed by the influence of typhoid fever. The other believed the case to have been typhoid fever modified or influenced in its course by malaria.

It is the opinion of many physicians, including myself,

that if we are treating a case of fever in which there is a doubt in the diagnosis, as regards typhoid and malarial fever, we should treat the case as one due to malaria. Should our treatment fail to break the fever, then we should treat it as a case of typhoid fever.

The treatments of this disease have been very varied. Some advocate the treatment by means of large purgative doses of calomel and vegetable cathartics first, to be followed by large doses of quinine. The quinine is recommended to be given when the fever is highest, on the plan that Liebermeister administered it. In this fever as well as typhoid fever, large doses of quinine act as a sedative, and are perfectly safe in the beginning of the fever or before the nervous system has been exhausted. No less than fifteen grains, nor more than thirty grains, should, in my opinion, be given, though much larger doses than thirty grains have been administered. Should this treatment fail to break the fever, then the expectant plan of treatment is recommended—treating the patient with an eye to his strength being kept up, and his symptoms treated as they may occur. Vegetable and mineral acids are recommended; so are sour wines. Butter-milk is given in preference to sweet milk. Antipyrin may be tried; but it should be given with the view of reducing temperature.

Tincture of gelseminum was recommended by Dr. Hudgins of Newberne, Ala. He gives antipyrin until the temperature is reduced; then stops it and gives the fluid extract of gelseminum, five to six drops every four hours, and succeeds in keeping down thereby the fever. Dr. Hudgins relieved insomnia and restlessness by potassium bromide, chloral, and hyoscyamus.

Dr. Morton of Vernor found quinine to prolong the fever. He used nitric and muriatic acids internally, and relied upon sponging the body with hot or cold water, as may be most agreeable to the patient.

The *diet* should consist of roasted or baked apples, apple cider and butter-milk. He reports a large number treated, and no deaths.

I have used the mixture of iodine and carbolic acid for the purpose of controlling the bilious vomiting, which oftentimes is a very distressing symptom, and have found it of great benefit.—*Va. Med. Monthly.*

THE INFLUENCE OF ALCOHOL UPON THE HEALTHY STOMACH.

The question as to whether alcohol should be employed is one that periodically comes up for discussion, though there can be but little doubt that rationally used, it is one of the most effective weapons that the physician has at his command. There is much more room for discussion upon the point as to whether the effect of alcohol upon healthy individuals is beneficial or injurious, and here it is that the opinions of the profession are most widely at variance. The proper way of deciding the question is by means of carefully conducted and systematic experimentation, and we see that an attempt has been made in this direction by Dr. Blumenau, at the laboratory of Prof. Koshlakoff in St. Petersburg.

Blumenau (*Vratsch—Deutsch. Med. Zeit.*) had for subjects five healthy individuals between the ages of 22 and 24 years, to whom he gave alcohol 10–20 minutes before a meal, in doses of 100 c.m. (3½ oz.), in 25 per cent. or 50 per cent. solution. The meals uniformly consisted of 500–600 grammes of soup, a cutlet of 90–100 grammes, and 200–250 grammes of bread. The results of these experiments may be summed up as follows:

1. Stomach digestion is noticeably slowed during the first three hours following the ingestion of alcohol, as the result of a marked decrease in the digestive power of the secretions. This decrease is independent of the lessened proportion of hydrochloric acid and the weakened acidity of the stomach secretions in general. This last is determined almost entirely by the amount of lactic acid present.

2. The changes are the more apparent in abstemious persons than in those who are habitual drinkers.

3. Other things being equal, strong solutions of alcohol produce more intense changes than weaker ones.

4. Gastric digestion becomes more vigorous by degrees during the fourth, fifth and sixth hours after a meal. The acidity of the stomach juices increases (to 0.22–0.35 per cent.); the proportion of hydrochloric acid gradually increases, reaching its maximum (0.12–0.14 per cent.) in about five hours,

while the proportion of lactic acid decreases and reaches the minimum about the same time, and at the end of five hours the lactic acid reaction is either absent or very weak.

5. As may be seen from these changes, the gastric secretions attain greatly increased digestive power during the second three hours.

6. The production of the digestive fluids is much more profuse and enduring under the influence of alcohol than without it.

7. The activity of the pepsin is at first slightly decreased, and the motor ability of the stomach is also lessened.

8. The intensity of the changes in the motor and absorbtive properties of the stomach is commensurate with the degree of concentration of the alcoholic ingesta.—*Med. Rev.*

THE DIURETIC PROPERTIES OF CALOMEL are emphasized in the report of three cases of cardiac lesion by Dr. E. G. Garvene (*Therap. Monatshefte*, April, 1890, in *Therap. Gazette*, June 16th), resulting in severe dropsy, in which the use of calomel produced the most striking relief. In these three cases digitalis, caffeine, and strophanthus had been used, and almost without effect. Calomel was, therefore, substituted in doses usually of 1½ grains every two hours, with an almost immediate increase in the diuresis. In some cases slight diarrhea was produced, but no symptoms of stomatitis occurred, perhaps through the regular employment of gargles of potassium chlorate and brushing of the gums with tincture of myrrh.

IN INFANT'S "SUMMER COMPLAINT."—Tincture Indian cannabis, 24 drops; spirit chloroform, 5 drops; tinct. kino, 3 40 grammes (1 fl. dr.); peppermint water to make 26.25 grammes (7 fl. dr.); add distilled water, 3.75 grammes (1 fl. dr.) Shake well — teaspoonful every one, two or three hours. *South. Med. Rec.*

UNDERWEIGHT QUININE CAPSULES.—Dr. V. C. Vaughn reports in the *Medical News* the analysis of some capsules containing quinine. Of from 40 to eighty capsules assayed, only 2 contained the amount of quinine claimed upon the label.

DEPARTMENT OF

GENERAL SURGERY.

EDITED BY

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CYSTIC TUMORS OF THE INFERIOR MAXILLA.

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Excluding cysts occurring secondarily in tumors found in this bone, the inferior maxilla presents us two varieties of cystic growths: first, cysts occurring in connection with teeth; second, cysts not connected with the teeth and finding origin in the bone proper. Cysts in connection with the teeth are,

1st— polyp like, attached to the roots of "cut" or fully developed teeth.

2d— dentigerous cysts, dependent upon the presence of "uncut" teeth.

It would seem not an uncommon occurrence among dental surgeons of experience, to find small cysts attached to roots of teeth after extraction. These cysts contain a mucus-like substance, and sometimes pus. When small, their very existence is not susceptible of being diagnosed prior to extraction of the teeth; occasionally, however, one of these cysts so enlarges as to form a veritable maxillary growth demanding treatment. Even in such instances, as the tumor requiring the attention of a Surgeon, there is no point diagnostic between this and other cysts occurring in this bone. It is only by exclusion, and after incision and exploration, that the nature of such a cyst can be determined.

According to Mr. Heath, these cysts lie beneath the periosteum of the tooth fang; but no hint of the cause of origin have I been able to find.

DENTIGEROUS CYSTS are cysts occurring in the *maxillary bones*, and depend for their origin and existence upon an "uncut" tooth—one that has failed to present its crown through the mucous covering of the gum, by reason of having taken primarily an abnormal direction, or, having primarily been too deeply placed in the bone, or lastly, because of a want of development in the fang. This "uncut" tooth (or mayhaps teeth), is always to be found in the dentigerous cyst, which contains besides the tooth a fluid of serous nature, but which may sometimes be mixed with pus by reason of inflammatory changes in the cyst wall. The cyst wall is a tough, fibrous membrane, lined by epithelium, and is natural to the part. It is the sac in which the tooth grows until it reaches the surface of the gum. This sac by reason of irritation from the retained tooth becomes hypertrophied, there is an increase of secretion from its epithelial-lined surface, and thus we have a tumor—a cyst due to effusion, differing from the variety of cystic growths which we come next to consider, and which are adventitious cysts.

Cystic tumors. This term, without a qualifying adjective, seems by common consent to be applied to that class of tumors occurring in the maxillary bones and composed of sometimes a single cyst, and at other times many cysts, finding origin in the substance of the bone and not dependent upon any aberration in dentition. They are not cysts due to retention, nor are they cysts dependent on effusion into a sac natural to the part, but are purely new-formed, adventitious cysts. I find several surgical writers describing this affection as cystic disease of the bone because of the fact that the entire body of the bone and even the rami, may be affected or included in one of these multilocular cysts.

The disease begins at some one point and gradually extends, in some instances throughout the bone; in others it confines itself to a segment which continues to grow while the remaining bone shows no tendency to become affected. It has been my province to remove three of these multilocular cysts, to which Gross applies the term "compound cystic tumor," to distinguish from those composed of a single sac. As my observation goes, these tumors occur later in life than do den-

tigerous cysts; they are of slow growth and show little if any tendency to impair the health. In one instance I saw glandular enlargement in the submaxillary region, and there were several loculi of the tumor filled with brain-like matter. I rather feared encephaloid disease had sprung up in the growth, and that it would show itself soon in the enlarged glands, but three years after removal of nearly half the lower jaw (with the tumor), the patient was in the best of health with no evidence of malignant disease.

A section of one of these tumors will show the body of the bone expanded, the internal and external plates of compact tissue greatly thinned and crackling like parchment under palpation; the cancellous tissue will have disappeared, and its place be occupied by a single large cavity or fibrous sac, containing fluid, serous in character, or if it be a multilocular cystic growth, there will be many partitions giving many loculi lined by fibrous, epithelial-covered membranes. The fluid in these sacs varies from clear, egg albumen to dirty brown and even black, blood-stained, watery fluid—and again it is thick and encephaloid-like.

Diagnosis. Cystic tumors of the inferior maxilla are by no means of rare occurrence, and whatever be their several sources of origin, they present some features in common: namely, slowness in growth, absence of severe pain, absence of glandular involvement, with no constitutional impairment except as attends on any tumor interfering mechanically with mastication and deglutition. There need be little or no difficulty in deciding on the cystic nature of these tumors. The exploring needle will detect the cavity.

1st. Cysts attached to *roots of teeth* can only be diagnosed *in situ* after incision, and are of extremely rare surgical importance.

2d. Dentigerous cysts usually attend on second dentition, rarely in connection with milk teeth, and still more infrequently have they been found with supernumerary teeth. It is only in the comparatively early stages of growth of a dentigerous cyst, before it has by increase of size involved the sites of many teeth, besides invading the body of the bone, before the patient's memory has become clouded as to

the exact point at which "the swelling was first noticed," before all normal landmarks have changed or passed away, that a diagnosis is at all easily arrived at. Later than this, when the tumor is large and definite information concerning missing teeth is unobtainable, there are few if any points of diagnostic value; nothing short of incision will tell the nature of the tumor. The leading point in a positive diagnosis is the fact that some one tooth (or teeth) which should be present, and that too at the site of the tumor, has never shown itself.

3rd, cystic tumor simple, or compound. Instead of the continued non-appearance of some tooth, we usually find that one or two aching permanent teeth preceded the appearance of this tumor, and to the irritation caused by presence of these bad teeth the growth is usually attributed, and probably not unjustly. A multilocular cyst ought readily enough be determined from cysts of any other nature.

Treatment. Obviously, there is but one treatment for these tumors, one and all, and that is surgical. When they have not reached such dimensions as to have completely destroyed all outline and framework of the bone, a free incision, evacuating the contents and packing the sac with gauze, with a view to having same fill by granulation, is the proper treatment and usually succeeds. In some instances the whole external wall may be cut away, and when a multilocular cyst, the contents curetted or gouged out, leaving the internal plate. The incisions in such cases are always within the mouth, leaving no defacing cicatrices, and when the inner plate or the continuous line of the body of the bone can be left, there usually follows but slight deformity. There will come up, occasionally, cases in which the tumor has reached such dimensions and played such havoc with the bone, especially compound cystic tumors, that excisions of sections of the bone or even the entire maxilla, is the proper thing to do. Most of the cases that have come to me for treatment have been of the latter kind, requiring removal of parts of the bone with the tumor—excision.

As an example of a simple cyst of the jaw, I beg to report the following case—illustrated by Fig. 1:

Case I. Mrs. K., white, aged 43 years, resident of Mississippi, was referred to me by Dr. W. P. Connor, and presented a tumor involving the right half of the inferior maxilla. The growth began some six years previous to my examination, and by gradual increase had attained the dimensions of an average-sized cocoanut. On one or two occasions it had been opened with a bistoury and contents of a glairy nature evacuated, only to reaccumulate. Besides the disfigurement shown in the accompanying cut, Fig. 1, the growth so filled

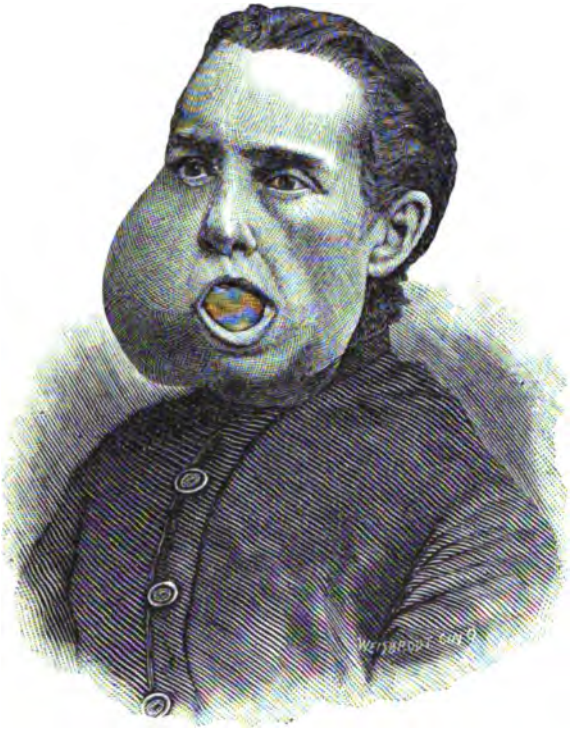

Fig. 1

the buccal cavity as to entirely prevent mastication of food, and it was with great difficulty that the patient could swallow liquid nourishment. As a consequence, she was so weakened and emaciated that removal of the tumor could not be advised just then. There was no pain felt in the growth; no tendency to ulceration; no glandular involvement, although so

long a time in existence; manipulation was painless. Fluctuation was distinct, and while there were many soft points to be detected both on the cutaneous and mucous surfaces, distinct areas of shell-like bone could be mapped out and a parchment-like crackle was very perceptible on palpation. The growth involved three-fourths of the body and lower third of ramus right side. Both portions of the bone were expanded to a mere shell. The diagnosis of cystic tumor involving the body of the bone was readily enough made, and removal of the bone clearly indicated. It is to be remembered that a free incision, evacuation and packing the cavity is the recommended operation for these tumors, especially those of simple character (single cyst), but in this case there was no outline of body of bone left—only islands of bone scattered irregularly over a thickened sac. Hence, to my mind, a more thorough operation of removal was indicated. The general health of the patient was so poor that my first step was to evacuate the contents of the tumor by means of an aspirator entered through the buccal surface. More than a pint of chocolate-colored, glairy fluid was drawn off, and the patient thus enabled to take nourishment liberally. At end of three weeks she returned considerably improved, and the tumor had refilled.

An incision was made along the base of the tumor, the facial artery was ligated, and by keeping carefully against the surface of the tumor very little blood was lost. Almost the entire right half of the maxilla was removed. The wound was packed with gauze and ample room left for drainage. Her recovery was rapid and at this time, 8 years since operation, she is enjoying excellent health. A gristly mass has taken the place of the bone removed, and very little disfigurement exists.

The tumor proved a simple cyst—the fibrous wall was more than a line in thickness. At the floor of the sac there were several bony partitions projecting half an inch into the cavity. (This specimen is now in the museum of the Memphis Hospital Medical College).

Illustrative of compound or multilocular cysts of this bone, I beg leave to briefly report three cases:

Case I. Patient, a colored woman from Mississippi, 40 years of age, with the usual history of repeated severe and prolonged spells of toothache, preceding the appearance of a swelling in the left half of the lower jaw, which soon developed to a veritable tumor. Upon examination I found her as shown in Fig. 2—a growth as large as a cocoanut. The

Fig. 2

COMP. CYSTIC TUMOR.

body of the bone and lower portion of ramus of left side were expanded to a thickness of over five inches. There were numerous soft spots yielding a sense of fluctuation between the patches of bone, so that a diagnosis of compound cyst tumor was readily made. Mastication was very much interfered with, but she was able to keep in a good state of flesh on liquid and soft diet. A small exploring trocar revealed

several cysts, with as maay varieties of fluid. There was no glandular involvement. The indications were that the tumor consisted of very many cysts, and consequently much solid matter in shape of partition walls and living membranes. I decided on excision instead of incision and curetting.

My incision was carried from just below the temporo-maxillary artic., along the base of the tumor to the symphasis, then upward through the lower lip. Hemorrhage was controlled by forceps. The tumor was then denuded of its coverings, both externally and for the greater part on its internal surface by using the handle of the knife. The bone was cut one-half inch to left of symphasis. The ramus cut through just below the base of coracoid process, which together with condyle was left in position. The remaining attachments of soft tissues to inner aspect were severed and mass removed. Paquelin's cautery was used to touch several bleeding points. The opening in the buccal mucous membrane was closed and nearly two-thirds of the skin incision was united by suture. One opening was left dependent for drainage and the cavity packed with gauze. In spite of great care, there occurred sacculation of pus, in contact with sawn end of bone, and erysipelas supervened, spreading over entire face. After eight weeks all had healed save small superficial surface, and she went to her home. (College Clinic, '89-90.)

An examination of the tumor confirmed the diagnosis of compound cyst.

Case II. Multilocular cyst of right half of lower jaw in patient twenty-eight years of age. Was preceded by toothache of much severity; general health of patient poor and there was some glandular enlargement in nearest cervical glands. The operation was very similar to that described in Case I, and the tumor identical in make-up, excepting two of the cells composing the mass contained brain-like matter, causing me to fear a return of the disease. This patient made a rapid recovery, and three years later was in excellent health. The size of this tumor was almost equal to a large orange—extended from near symphasis to the angle. Paquelin's cautery was found very convenient in checking the free oozing from patches of small vessels. (College Clinic, '88-89.)

Case III. Illustrative of cystic disease of the lower jaw is the case of Henry M., 40 years of age, very much emaciated from starvation, due to inability to take food. No glandular implication. Nearly all of the bone involved in the tumor. The disease began fifteen years prior to appearances shown in cut, as small double cyst at roots of incisor teeth. These cysts were opened and injected repeatedly with iodine, nit. silver, etc., but with no benefit. Other cysts began forming. He declined further treatment at that time, and did not consult a physician till Feb., '86, when I saw him and advised

Fig. 3

excision of the entire mass. Operation was performed without encountering much difficulty and but little hemorrhage. All of bone was removed save half of right and the third of left rami. Tongue was kept forward by means of ligature for 48 hours, at end of which time he could control it without

assistance. Took nourishment well, and promised fair to recover. On seventh day after operation, after sitting up greater part of two days, he had chill and died of congestion. The tumor weighed 7¼ pounds. Transverse diameter was 9½ inches, ant-post. thickness 7¾ in median line. A section showed dozens of cysts, typical of these tumors.

CULLINGS FROM GERMAN EXCHANGES.

WM. KRAUSS, M.D., MEMPHIS, TENN.

Report of some of the papers read at the Annual Convention of German Surgical Association, Berlin, April 9–12, 1890.

[From Supplement to Centralblatt fur Chirurgie.]

KAPPELER OF MUNSTERLINGEN ON CHLOROFORM AND ETHER ANÆSTHESIA.—All efforts to substitute new anæsthetics for chloroform and ether have thus far been crowned with little success, and only confirm the opinion of the majority of surgeons that the search for an absolutely safe anæsthetic has been in vain. Nitrogen monoxide is not entirely safe, and its application is too complicated. Nor is ether without danger, as has been shown by physiological experiment as well as clinical experience. In Germany chloroform still has the preference in surgical practice, and properly so. The attacks of the advocates of ether can best be met by improving the method of using chloroform. The application by mixing and other plans are criticised briefly. The surest and safest means to improve chloroform anæsthesia, as shown by later physiologists, is to mix it with air in certain definite proportions. An apparatus that can be easily used even in private practice is shown, by which the maximum of 14.5 gm. to 100 litres air is never exceeded, and by which the concentration diminishes in prolonged anæsthesia. It is also provided with valves to regulate the proportion of chloroform. This apparatus is made by Falkenstein in Constance. In 200 cases it gave very satisfactory results. For operations lasting 2½ to 3 hours not more than 40 to 56 gm. (1½ to 2 ounces by weight) were used. Anæsthesia in 8 minutes. Greater excitement only in drinkers. Vomiting in 7 per cent. of cases.

Discussion. Thiem finds bromethyl inapplicable in larger operations.

Bruns favors ether, as it increases strength of pulse, chloroform diminishing it.

Stelzner, on ground of experience in 900 cases, also favors ether.

Zielewiez reports on mixed anæsthesia: Is in favor of ether.

Kappeler: Effect of chloroform on pulse is slower than that of ether. The observations on ether are comparatively less numerous.

Bergmann proposes that members keep statistics of their observations for ensuing year.

BRUNS—TREATMENT OF TUBERCULAR JOINTS AND ABSCESSES WITH IODOFORM INJECTION.—Author's experience shows that continuous contact of iodoform with tubercular tissue will kill the specific cause and cure local tuberculosis. A freshly prepared sterilized emulsion of iodoform in glycerine or olive oil (5 to 10 per cent.) is injected after evacuating the cavity. Previous irrigation not necessary. Injections are to be repeated as often as necessary. Cavities will fill up in 2 to 4 months. Of over 100 cold abscesses 80 per cent. were healed, including 10 depending sacs from spinal caries. In view of these favorable results he recommends it in tubercular empyema.

Of over 50 cases of tuberculous joints he had some surprisingly good cures of several years' standing. If abscesses surround the joint, the cavity is emptied and moderately filled with the emulsion, repeated weekly. Motion in joint may remain partly or wholly; if much pain exists, ankylosis is apt to follow. In severe forms and old subjects the treatment does not cure, but improves matters wonderfully.

The best results thus far have been in the wrist; nearly as good in the elbow, knee and ankle joint. The treatment is not to be discontinued too soon. The advantages are: Simplicity, safety, efficiency, and general applicability.

Heusner, Trendelenburg, v. Eiselberg (Billroth's Clinic), and Krause (Freiburg) reported favorable results from its use.

Krause (Halle) also read a paper on the subject, and gets best results in wrist and ankle joints. At the hip ankylosis is the usual result, there being some motion in two cases. Two very severe cases with loss of cartilage and bone, posi-

tion of luxation and manifold abscesses, were cured. If abscesses exist, he always irrigates thoroughly with boracic acid solution. The best place for insertion of trocar in various joints is as follows: In the wrist close under styloid process; in elbow over the head of the radius; in shoulder external to acromion or coracoid process; in hip over trochanter, *avoiding* flexion, if possible, and abduction and external rotation *always*. At the knee the puncture is made under patella; at ankle underneath malleolus, by going in vertically and then upward.

Gluck, Berlin, read an interesting paper on plastic surgery. He concludes on ground of observations made that the nutrient bridge of pedicled flaps for covering defects is not deserving of the name; that the torsion necessary to bring the tissue in its new position cuts off what little, if any, circulation there may be in it. This short transition between autoplasty and transplantation induced the author to give up the former entirely, and finds the latter far more satisfactory. He has transplanted homologous and heterologous tissues for filling in defects, even of higher tissues, such as nerves, tendons, bone, &c., using absorbable and viable tampons for filling spaces. Experimentally has proved possibility of aseptically closing wounds of large arteries, preserving the circulation, without intervention of thrombi or resistant scar. His radical operation for hernia essentially consists in fixing ivory "thimble" into inguinal canal.

Nerve suture is next considered. The continuity of nerves has been successfully re-established by the insertion of a portion of rabbit's nerves, or a few strands of catgut. Dr. Bernhardt (neurologist) has satisfied himself of the regained functional activity in such a case. The hystogenesis of nerve regeneration is considered in full.

Köllicker (Leipzic), who has extensive experience in neuroplasty, has come to the conclusion that tubulization by absorbable drain is the best mode of repairing a nerve defect. He thus paves the way for the growing central end. There is no such thing as primary regeneration.

Gluck claims priority for tubulization and transplantation of nerve.

THE ANNALS OF SURGERY for May contains the following interesting papers: Excision of Superior Maxilla, by J. D. Bryant, M.D.; On the Pathology and Treatment of Aggravated Hemorrhoids, by L. S. Pilcher, M.D.; On Symmetrical Manifestations of Syphilis, by W. B. Platt, F.R.C.S.; On Congenital Equino Varus, by V. P. Gibney, M.D. All excellent articles. Besides the above papers the journal presents abstracts of many important papers by foreign surgeons. We heartily recommend this journal to our readers, as the journal of America, on topics pertaining to surgery.

DEPARTMENT OF

GYNECOLOGY.

EDITED BY

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To whom all matter pertaining to this Department should be addressed.

ON SUTURING THE REPOSED RETROFLEXED UTERUS TO THE ANTERIOR ABDOMINAL WALL.

C. G. Leopold, (*Sammlung· Klin. Vortrage*, No. 333), narrates the histories of six cases recently operated upon by him. In three the condition was complicated by chronic ovaritis and salpingitis; in one there was a very firm, immovable retroflexion consequent upon myoma of the fundus, and in two there was pure retroflexio uteri which caused great suffering. It is a self-evident axiom that the non-operative treatment of retroflexions must now, as formerly, be regarded as an extremely valuable course, especially the treatment by judiciously selected pessaries. It should be given a most thorough trial before broaching the subject of operation. But it is equally true that in a number of cases the patience of physician and subject is exhausted by prolonged and futile attempts at reposition by mechanical means. Cases, too, occurring among the poorer and working classes have no time for temporizing procedures. He lays down the following rules:

Ventral fixation of the retroflexed uterus is indicated (1) above all during the performance of ovariotomy and salpingotomy for chronic inflammation of the ovaries and tubes, whether the retroflexed organ be adherent or not; (2) in the removal of growths which hold the uterus permanently in a retroflexed position (subserous myomata of the uterus, tumors of the ovaries and parovarii); and (3) in pure retroflexion of the perfectly mobile, non-adherent uterus, when the suffering of the patient can be traced solely to this condition, and other known forms of treatment have been resorted to without avail.

The operation should be simple and trustworthy. The most important preparatory work consists in sundering the uterine adhesions, which, though often sparse and thin, are now and then very numerous and of cartilaginous consistence; the frailer one may be best separated by the index finger. Bleeding seldom follows if carefully done; should it occur and continue, the part may be tamponed with a roll of iodoform gauze, which may remain in position till the close of the operation. When the adhesions are numerous and firm the greatest caution is necessary; force should not be employed; what the fingers cannot separate should be cut with a knife or scissors; the sutures are made so that from one to three deep abdominal sutures pass through the fundus uteri and draw it to the abdominal wall. The first enters about one-half to one centimetre anteriorly to the tubal opening; the second between it and the third, one-half to one centimetre behind it, going transversely under the serous coat of the uterus and about two to three millimetres deep through the upper muscular layer. The three sutures should be long, so as to be readily differentiated later on. The abdominal sutures are removed from eight to twelve days later, the three fixing the uterus remaining until the fourteenth or eighteenth day; by this time the fundus is firmly adherent to the abdominal wall. In order to render the latter more certain, the serous surface of the uterus is scooped off at the point of apposition to the abdominal wall. The author finds this almost essential.

None of the cases were required to wear a pessary after

they had recovered; there was no disturbance of menstruation. The author concludes that the operation is still far from the ideal. The position of the organ is a forced one. In cases of pure retroflexion, and after the removal of tumors which have for years caused retrodeviation of the uterus, the operation will for some time to come have to suffice. But in the more frequent cases of chronic oophoritis and salpingitis with retroflexio uteri, which require complete castration with ventral fixation, it becomes a question whether it would not be better to remove the uterus and ovaries entire per vaginam; the uterus after castration is useless.—*Am. Jour. Obs.*

MASSAGE OF THE UTERUS.

The manual operations in uterine massage are simple, amounting practically to the abdominal and the vaginal, that is the bimanual, touch. The bladder should be empty when massage is to be performed, as a preliminary. The patient should be in the dorsal position, the legs being flexed upon the thighs, and the thighs upon the pelvis. Respiration should be easy, the abdominal muscles being as completely relaxed as possible. The operator should stand at the left of the patient, and introduce, if possible, both the index and middle fingers of the left hand, passing them into the anterior vaginal *cul-de-sac*, so as to sustain the anterior wall of the uterus. The other hand then gently but firmly depresses the abdominal wall, and seizes the body of the uterus, correcting displacements, if possible, should any exist. If the displacement cannot be readily remedied, the knee-chest position should be assumed, and an effort at replacement made in that position. This being impossible, efforts should be made from time to time with the patient in the dorsal position, pressure and friction being used until the adhesions have yielded.

The following precautions will facilitate massage and make it more tolerable:

1. The body of the uterus having been seized, pressure upon it should be gradual.

2. In order to grasp it well, the hand must depress the abdominal wall during expiration, and during the succeed-

ing inspiration it must retain its position, and with the next expiration it must be depressed still more, this plan being continued until the desired depression is obtained.

3. The uterus must not be roughly seized, and pressure upon it must be gradual. Sometimes it will cause pain in the loins, the anoperineal region, and the epigastrium.

4. One's entire attention must be given to the proper holding of the uterus; this is easy if the uterus is large and soft, but very difficult if it is small, spheroidal and hard, as it will readily slide from one side to the other. After one or two months of this treatment patients are usually much improved, and one can then prescribe liberal diet, rest in the country, sea-baths, or systematic hydrotherapy. This method of treatment is sometimes painful, but the pain soon ceases after the treatment is concluded. Great gentleness is requisite at the beginning of the treatment and at the beginning of each seance. For those who are inexperienced in using this method, the first cases practiced upon should include women who are thin, and with whom uterine catarrh is the chief symptom. The massage should not be continued more than four or five minutes. Treatment should be begun as soon as possible after the end of a menstrual period. The principal difficulties to be encountered are:

1. Extreme sensibility of the entire body and of the abdominal wall in particular.
2. Obesity and tympanites.
3. Deviations and displacements.
4. Herniæ.
5. Narrowness of the vagina.

Brandt advises that the uterus be sustained by a finger passed into the rectum. There are three contra-indications—virginity, acute or sub-acute inflammation of the uterus, and pregnancy. The accidents in the author's experience have been few and insignificant.—*A. F. C. in Norstrom. Jour. de Med. de Paris, July 28, 1889.*

TREATMENT OF ENDOMETRITIS.

Dr. Szabo, of Budapest, Hungary, (*Centralbatt fur Gynakol.*, Feb., 1890,) recommends (with Rheinstadter, Brose, etc.), a solution of chloride of zinc against endometritis. The formula is:

℞. Tinct. chlor.,
Aquæ dest., aa

He dips a Playfair sound, wrapped in cotton into the solution and then introduces it quickly into the uterine cavity, which has been previously well disinfected and sounded. Three to five days later he begins to irrigate the uterine cavity with a three per cent. solution of chloride of zinc, by the aid of Bandl's tube, the latter being provided with numerous fenestræ. Forty-one cases treated successfully by this method speak favorably for this simple procedure.—*P. & P.*

DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

EDITED BY

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THE PATHOGENESIS OF SYMPATHETIC OPHTHALMIA AND A NEW METHOD OF TREATMENT.*

ABADIE, PARIS.

[Annales d'Oculistique, Mars-Avril, 1890.]

The researches of Leber and Deutschmann have, in the author's opinion, established beyond doubt that genuine sympathetic ophthalmia following a traumatic lesion is due to infection by micro-organisms. The eye may be infected at the time of infliction of the wound or subsequently. This theory, which was the outcome of experimental research, has been confirmed by, as it has itself helped to elucidate, clinical observation.

It is most rational to admit that the infection travels to the second eye by the optic nerve and chiasma and the opposite nerve.

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*Ophthalmic Review, June, 1890.

The wounded eye becomes a pathogenic focus. The micro-organisms which have been introduced increase and multiply rapidly in tissues, the vital energy of which is lowered as a result of injury.

When they have become numerous and powerful they begin to attack healthy tissues, spreading from the wound as a centre.

Clearly, if enucleation of the injured eye be performed before the microbes have begun to spread to the nerve, or, failing this, if the section of the optic nerve be made in a still uninfected part, the second eye will be saved from attack.

Moreover, if the other eye be already affected, excision of the wounded one will remove the chief focus of disease, where the development of micro-organisms is proceeding with greatest intensity. In such a case, however, this treatment alone is insufficient, and what measures should be adopted to cure the already sympathizing eye?

If the microbic infection of the second eye is just beginning, the micro-organisms which have reached it will find themselves in healthy tissues, which they can with difficulty disorganize. Either phagocytes or the normal cellular elements (this point in bacteriology is still obscure) are endeavoring to destroy the invaders, and if their numbers are not reinforced from the source of infection, the chances are that the microbes will go to the wall. Such a desirable end will be greatly favored by treatment by mercurials or other germicidal remedies.

But if, *au contraire*, enucleation of the wounded eye is practiced long after the second eye has become invaded by the micro-organisms and its tissues enfeebled, but little chance offers for its ultimate recovery.

In such a case, any surgical interference with the sympathizing eye until all morbid processes have entirely subsided appears to light up the activity of the micro-organisms and lead to still greater damage to the tissues.

Acting upon the lines here indicated, Abadie recommends the following treatment in cases of threatened or existent sympathetic inflammation; by such means he thinks that,

except in such cases where the wounded eye is hopelessly destroyed, its removal may be avoided.

If the case comes early under care, strictly antiseptic treatment should be adopted, in the hope of preventing infection. If, in spite of these measures, it occurs, the wound should be carefully and thoroughly cauterized with a fine galvanocautery, the patient being anæsthetized.

If this is insufficient, the injured eye should have injected into it one or two drops of a solution of sublimate, 1 : 1000. Such injection causes for some hours considerable reaction, which slowly subsides, and amelioration in the condition of both eyes ensues.

The author gives very incomplete notes of three cases which he has treated in this way :

1. A woman, aged 60, suffered from a large rupture of the sclerotic half way below the margin of the cornea and the equator of the eye; through this wound the lens escaped and into it the ciliary body prolapsed. She was seen some hours after the accident, and the wound was carefully cleansed with sublimate solution 1 : 2000, and an antiseptic dressing applied. Three weeks later the second eye became acutely affected. The wound and the prolapsed choroid were freely cauterized, and two drops of a 1:500 solution of sublimate injected into the eye.

Sharp reaction followed, with very severe pain. This slowly subsided, and both eyes rapidly improved. Four months later it is stated that the injured eye could see to read with + 15 D. The acuteness of vision regained by the sympathizing eye is not accurately stated.

2. Boy, aged 14, suffering from severe sympathetic ophthalmitis following injury; vision in each eye was greatly reduced. Two drops of sublimate solution (this time 1:1000) were injected into the wounded eye. The reaction was much less than in the previous case, and was followed by considerable improvement in both eyes.

3. A man with sympathetic ophthalmia of the left eye, whose right eye had been removed. In spite of enucleation and mercurial inunction, the disease continued to advance, and vision became progressively worse. One drop of a 1:1000

solution of sublimate was injected into the eye, with the result of checking the disease.

The author believes that in seemingly hopeless cases, such as the last one reported by him, this method of treatment offers a better chance of saving useful vision than the means which have been heretofore advocated and employed.

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Secretaries of medical and surgical societies will favor us by sending dates of regular meetings, with brief programme of important subjects coming before the meeting.

All matter must be in our hands on the tenth of the month preceding its publication.

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All communications other than provided for above, should be addressed to

JAS. L. MINOR, M.D., Editor,
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WM. KRAUSS, M.D., Business Manager.

A MERITORIOUS ACT "TO PREVENT BLINDNESS."—The State of New York has taken a step in the right direction by passing a law requiring midwives to report to a physician or health officer all cases of ophthalmia observed by them in infants. With proper co-operation on the part of physicians there should be a decided reduction in the number of blind in that State; and not only will individuals be benefited but communities throughout the State will have financial burdens lifted from them. New York had in 1880, 5013 blind inhabitants, of whom at least 500 were blind from ophthalmia neonatorum, the disease which this act seeks to prevent. The cost of supporting one blind person in an economical manner has been estimated at $182 annually ($2 per week for board, $28 for clothing). This estimate would make the cost of supporting 500 blind people, $66,000 annually. But as the blind are consumers and not producers, the commun-

ity loses the earnings of as many individuals as it has blind inhabitants. Estimating a man's wages at $1.20 for each working day, and counting the wages of a woman at 40 cents a day, there is a yearly loss to a community for each man $404, and for each woman $256. And this for New York means more than $1,500,000 annually lost from the 500 blind referred to. It is too much to hope that blindness from ophthalmia neonatorum will disappear altogether from the passage of this act, but that it will be very greatly diminished is beyond doubt. And it is possible that the future will see, through legislative acts, and active co-operation in the medical profession, entire removal of this prolific cause of blindness. Now that New York has set the example, other States should follow it. Will not Tennessee fall into line and mark her progress and enlightenment by passing a similar act? If the profession could be brought to see the importance of this subject, there would be concerted action in their ranks, and legislators would not be slow to recognize its import—for every community in the State would be benefited, both financially and socially, by any act that would prevent blindness. The apathy which pervades the profession on this subject is difficult to understand. As humanitarians we should interest ourselves to lessen the number of sufferers from blindness; and as economists, we should interest ourselves to remove to some extent, the burden of an army of blind people from our communities and our State.

MEMPHIS HOSPITAL MEDICAL COLLEGE.—The Annual Catalogue of this institution is just to hand, and shows a still further increase of patronage over the previous year, in itself abundant evidence of the favor the college has gained with the profession. We cheerfully recommend correspondence with the able Dean, Dr. F. L. Sim, to all who contemplate attending lectures this fall. The clinical advantages offered by this college exceed those of any other college in the South, and it is this clinical teaching that the student learns most thoroughly and rapidly. Young men of the South, and those of the North who contemplate practicing medicine in the South, should appreciate the fact that diseases of this section

are more thoroughly understood, and hence more thoroughly taught, by men long resident here than can be by men in other and distant sections. We have only to say, consult your own interest on this point.

CHOLERA IN SPAIN.—Cholera of a malignant type appeared in the province of Valencia in May, and has become epidemic in that locality. It was here that the disease made such ravages in 1885. More than 25,000 deaths occurred that year from it. The sanitary condition which is exceedingly bad, is supposed to have been influential in its prevalence and fatality. Strict quarantine regulations have been instituted and are being enforced, and the dread disease will be kept under control and prevented from importation into other countries. Watchful care of competent sanitary inspectors at our ports of entry will prevent its advent in this country, should it evade the vigilance of those across the ocean.

MEDICAL LEGISLATION.—New York has passed an act which provides for the appointment of three Boards of Examiners, to represent the State Medical Society, the Homeopathic and Eclectic Societies, respectively, from lists of nominees by these Societies, by the Board of Regents of the University of the State of New York. These Boards will submit questions to the Regents, who will select those to be used in examinations of candidates. The questions will be the same for all candidates except on therapeutics. The Regents appoint the examiners, who take charge of examinations. The answers must be in writing, which are submitted by the Regents to the respective boards, who report to the Regents. The same standard is required for all. The act goes into effect Sept. 1, 1891.

AMBER BEADS FOR THROAT DISEASES.—Dr. St. Clair of Brooklyn, in the *Medical Summary* advocates the wearing of a string of amber beads around the neck by those who suffer from throat trouble. He claims that the milliampere meter shows a mild electric current constantly passing in a string of amber beads; and cites the case of his daughter, who was

a great sufferer from false croup, until an amber necklace was worn. So long as this was worn she was free from croup, and on leaving it off the trouble recurred, to disappear when the necklace was worn again. He has seen many similar cases in his own practice and in the hands of his brother practitioners, and claims that they are extensively used by the laity.

SANITARY AND ECONOMIC COOKING. — This book, one of the prize essays published by the American Public Health Association, was written by Mrs. Mary Hinman Abel, and took the prize offered through the Association by Mr. Lomb for the best article on *Practical Sanitary and Economic Cooking Adapted to Persons of Moderate and Small Means.*

It is complete in every respect, and is one of the most useful books that we have read. Not only every public institution but every housewife should be familiar with its contents. We know of no book that we can commend more unreservedly. Published by Essay Department, American Public Health Association, Rochester, New York.

A NEW BACILLUS.—A recent candidate for bacteriological recognition is that found in the hailstone. Its pathological significance has not yet been determined, but it is supposed to take an active part in the production of cyclones. Some of our neighboring cities are offering handsome prizes for a germicide which will annihilate this active micrococcus.

Robinson's Lime Juice and Pepsin is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. (See advertisement in this issue).

A NEW AND HANDSOME DRUGSTORE.—E. A. Morrison, late of Dowdy & Co., will, in a few days, move into his new and commodious quarters in the Grand Opera House block, corner Main and Beale. Mr. Morrison has, by years of experience in the drug trade, built up a reputation for ability, honesty and fair dealing, which will bring success. And his

new store, in an excellent neighborhood, will contain a full line of all articles to be found in a first class drugstore. None but the best goods will be kept. Special attention will be paid to prescription work.

ORKNEY SPRINGS.—We would call special attention to this popular summer resort, and commend it to our professional and other friends who desire to rid themselves of malaria by seeking a healthful climate and alterative mineral waters.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.—The 17th annual session of the Mississippi Valley Medical Association will be held at Louisville, Oct. 8th, 9th and 10th, 1890. The medical profession is respectfully invited to attend. The meeting promises to be of great social and scientific interest, as the profession of Louisville are doing their utmost to make it a success. Ladies accompanying physicians will be made especially welcome. Gentlemen wishing to read papers will please send titles of the same at an early date to the secretary, Dr. E. S. McKee, Cincinnati.

BLUE RIDGE SPRINGS DYSPEPSIA WATER.—We would call special attention to this excellent mineral water, which can be had of all druggists. Alterative, tonic or purgative, according to quantity used.

REED & CARNRICK.—E. T. Page of Ingersoll, Texas, the father of the *Texas Quadruplets*, writes the above firm that their Soluble Food has been used with the best results, after other preparations failed to agree with his four infants. Lacto-preparata and phospho-caffeine comp. receive equally as high endorsement from all who use them. They supply a long-felt want and do so completely.

DR. WM. KRAUSS.—We are glad to announce that Dr. Krauss has taken the position of Business Manager of this JOURNAL.

THE

Memphis Journal of the Medical Sciences.

MEMPHIS, TENN., SEPTEMBER, 1890.

DEPARTMENT OF

PRACTICE OF MEDICINE & THERAPEUTICS.

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SODIUM SALICYLATE IN THE TREATMENT OF CHOREA.—In an article in the *Bulletin General de Therapeutique*, No. 16, 1890, Dr. Dresch speaks very favorably of the action of salicylate of sodium in cases of chorea. The disease, he says, is of greater gravity than is generally supposed, for it not infrequently causes death either directly or indirectly. The importance, therefore, of an intelligent and active therapy is manifest. He believes that chorea is a microbial disease, the micro-organism of which is probably of the same family as that of rheumatism. The choreic movements are to be regarded as reflexes provoked by the presence in the tissues of the specific microbe, and are similar to the cough of pertussis, the spasm of tetanus, the premonitory chill of certain fevers, etc. Having these views as to the nature of the disease, he adapts his therapeutic measures to them, as far as it is possible to do so, although he admits freely the inefficiency of salicylic acid as a microbicide. The treatment should be begun at the earliest possible moment, and should be energetic whether the beginning of the disease be severe or mild. The drug is not given as a germicide or an anti-rheumatic, but rather because of its action upon the medulla and cord,

where it affects the motor centers as well as the sensory, thus restraining the movements of chorea as well as the pain of rheumatism. It is probable, also, that it would act equally well in diminishing the severity of the paroxysm in whooping cough, though the author has never tried it in that affection. It is to this sedative effect of the drug he attributes the fact that he has never seen any excessively severe cases since beginning its use, and has not been obliged to have recourse to any of those agents which calm the paroxysms only by stupefying the patient. But another great advantage possessed by the salicylate is that it increases the elimination of waste products, being, like benzoic acid and its derivatives, a solvent; in other words, it opens the kidneys instead of closing them as do quinine and antipyrin, which are so often given in chorea. It is evident that the choreic movements must greatly augment the amount of waste products, both muscular and nervous, thrown into the circulation, which products are toxic and of themselves excite convulsions. It is of the utmost importance, therefore, that any remedy given for the disease should favor the elimination of these materials by the kidneys and other emunctories. Dr. Dresch has found the salicylate well borne in most cases, a child of twelve years taking without trouble as much as 60 grains in the twenty-four hours, the only precaution being to give the drug in small and repeated doses well diluted with slightly alkaline water. It is not usually necessary to continue the use of the remedy more than eight or ten days. During the first period of the disease the patient should be kept in bed in a well-ventilated room at an even temperature, and noise should be avoided as far as possible. A milk diet is the best if it is acceptable to the patient, but beef tea is not to be recommended. An enema of tepid water once a day is useful, but should not be insisted upon if the patient objects strenuously. Nothing, indeed, should be done that is liable to excite the child. As the disease begins to subside the treatment should keep pace with it, the child being allowed to get up and gradually resume his usual diet and amuse himself in his accustomed way. The author objects decidedly to sea-baths.—*Med. Record.*

USES OF COFFEE.—It is asserted by men of high professional ability that when the system needs a stimulant, nothing equals a cup of fresh coffee. Those who desire to rescue the drunkard from his cups will find no better substitute for spirits than strong new-made coffee, without milk or sugar. Two ounces of coffee to one pint of boiling water makes a first-class beverage, but the water must be boiling, not merely hot. Bitterness comes from boiling too long. If the coffee required for breakfast be put in a granitized kettle overnight, and a pint of cold water be poured over it, it can be heated just to the boiling point, and then set back to prevent further ebullition, when it will be found that while the strength is extracted, its delicate aroma is preserved. As our country consumes nearly ten pounds of coffee per capita, it is a pity not to have it made in the best manner. It is asserted by those who have tried it that malaria and epidemics are avoided by those who drink a cup of hot coffee before venturing into the morning air. Burned on hot coals, it is a disinfectant for a sickroom. By some of our best physicians it is considered a specific in typhoid fever.—*The Epicure.*

HEADACHES.—The treatment of headaches of young children brings us into an almost special line of cases. In the city of New York, at least, these headaches are best treated, as a rule, by giving small doses of iodide of iron, or the citrate of iron and quinine. In school-children, headaches have often to be treated by removal from school, the use of tonics, change of diet, and the application of glasses suitable to any eye-defects that may be present. But glasses should be the last thing tried, unless the visual trouble is very marked. In some children, arsenic acts well.

Headaches among brain-workers require, as a rule, a different class of remedies from those among muscle-workers. In the former class, nervines, like antipyrin, caffein, and the bromides, act well; while attention to diet, exercise, and the eyes is especially required. Among the laboring classes, especially women, anæmia, malaria, syphilis, and rheumatic influences must often be attended to. Among the best of symptomatic remedies is muriate of ammonium in large doses,

½ to 1 drachm, given in wafers. In the headache of neurasthenia, menthol, 5 grains in hot water, gives relief, or a combination of menthol, 5 to 10 grains, and antifebrin in 5 to 10 grains. Phenacetin is also a good remedy. A practical point of importance in the use of antipyrin is the dosage. Often the best results are obtained by small doses frequently repeated. The much-advertised effervescent preparations for headache contain too small a dose of caffein or of bromide to be of the best service. Of local applications, a spray or lotion of aconite, sheet-lint soaked in 20 per-cent. solution of menthol and wrapped on the head, solutions of cyanide of potash after the method of Trousseau, and Rithet's tobacco and quinine snuff, are some of the measures indicated.

Everyone meets now and then with cases of headache of obscure origin, obstinate in character, and intractable to every kind of treatment. The use of iodide of potassium and of the strong galvanic current and static electricity has been of service to Dana in some such cases.—*Dr. Henry Hun, in Annual of Universal Medical Sciences.*

Buttermilk is an article which has been taken up as a hobby by many persons. Ward (*Ther. Gaz.*) speaks of its use in albuminuria approvingly. This is not new, as Mitchell long since recommended it as a means of varying the monotony of the skim-milk diet. Buttermilk contains lactose, and is more strongly diuretic than sweetmilk. There is much difference in fresh buttermilk and that which is a few days old. The latter changes in its taste and becomes purgative. Ward speaks also of its use in sick stomach, infantile dyspepsia, vomiting of peritonitis, (where, however, he prefers koumiss) and of pregnancy. It should be given cold and in very small quantities. In cholera infantum but a few drops should be given at one time.—*Times and Register.*

Potassii Nitras in Intermittent Fever.—I have treated more than two hundred cases of chronic chills of malarial origin, from a few months' to years' standing; many complicated with enlargement of the liver and spleen, dropsy, jaundice, etc., all more or less emaciated and anæmic. Nearly

every case was cured with a single dose of potassii nitras. From two to fifteen grains of the salt, according to age, dissolved in a half-ounce of water administered just prior to the chill or during its continuance, did not only abort or arrest the chill, but effectually prevented its occurrence. In order to test the value of the remedy, I employed no subsequent treatment, but left the restoration to health (which was in nearly every instance rapid and satisfactory) to the *vis medicatrix naturæ.—J. D. Hunter, New Orleans; North Carolina Medical Journal.*

ACCORDING to the *St. Louis Polyclinic*, to prevent the blood from settling under a bruise, there is nothing to compare with the tincture or a strong infusion of capsicum annuum mixed with an equal bulk of mucilage of gum-arabic, and with the addition of a few drops of glycerin. This should be painted all over the surface with a camel's-hair pencil and allowed to dry on, a second or third coating being applied as soon as the first is dry. If done as soon as the injury is inflicted, this treatment will invariably prevent the blackening of the bruised tissue. The same remedy has no equal in rheumatic stiff neck.

MOLES ON THE FACE (says *Cin. Lancet Clinic*, May 31st), may be painted with the sodium ethylate, a fine glass rod being used. When the mole has a varnished look the ethylate is gently rubbed in with the glass rod to make it penetrate more deeply. The mole turns nearly black and a hard crust forms over it, which is nearly three weeks in becoming detached. When it comes off the mole is much lighter than before, and this treatment can be continued until the mark is scarcely noticeable.

TO REMOVE SUPERFLUOUS HAIR.—According to the *Brit. & Col. Druggist*, a good depilatory is made by mixing together in fine powder, 50 parts barium sulphydrate, 25 parts starch, 25 parts oxide of zinc, and making into paste with sufficient water. This is spread on the surface which is to be freed from hair, about an eighth of an inch thick and allowed to dry. When this is effected (it generally takes about ten minutes) the mass is removed, leaving a perfectly hairless surface. Irritation does not occur, but the mixture should not be applied to the same place on two consecutive days.

TREATMENT OF PROFUSE MENSTRUATION.—The following prescription, for cases of profuse menstruation, is quoted by the *American Practitioner and News:*

℞.—Dialyzed ergotin, ... 10 drams
Glycerin, ... 5 drams
Salicylic acid, ... 30 grains
Distilled water, ... 2½ ounces M.

Sig. One teaspoonful diluted with three teaspoonfuls of water, to be injected into the rectum after stool once daily.

Seasonable directions are given in the *Medical Standard* for the treatment of summer diarrhea: Carharrar recommends the discontinuance of milk as a diet, and substitution of liquid peptonoids with cocoa, pure brandy, and beef tea or broths. Water must be allowed freely, given in small quantities, and often. In bad cases he gives—

℞.—Acidi. salicylic, ... gr. ss
Cretæ precip., ... gr. x
Glycerin, ... ʒ ij
Aquæ rosæ, ... ʒ xiv M.

Sig. Fluidounce every hour for a child one year old.

The following mixture will prove of benefit in the treatment of intractable cases:

LOOMIS' DIARRHEA MIXTURE.

℞.—Tincture of opium, ... ½ fl. oz.
Tincture of rhubarb, ... ½ fl. oz.
Compound tincture of catechu (U. S. P), ... 1 fl. oz.
Oil of sassafras, ... 20 mins.
Compound tincture of lavender, enough to make . . . . . 4 fl. oz. M.

Sig. One teaspoonful every four hours, for adults.

SQUIBBS' DIARRHEA MIXTURE.

℞.—Tincture of opium, ... 1 fl. oz.
Tincture of capsicum, ... 1 fl. oz.
Spirit of camphor, ... 1 fl. oz.
Purified chloroform, . . . 180 mins.
Alcohol, enough to make . . 5 fl. ozs. M.

Sig. One teaspoonful every five hours, for adults.

DEPARTMENT OF

GENERAL SURGERY.

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BOOK REVIEW.

RAILWAY SURGERY. A Practical Work on the Special Department of Railway Surgery, for Railway Surgeons and Practitioners in the General Practice of Surgery. By C. B. Stemen, A.M., M.D., LL.D., with numerous illustrations. J. H. Chambers & Co., publishers, St. Louis, Mo. Price $3.00

It is a fact recognized and lamented by surgeons, that surgical authors up to the present time have failed to give due recognition to certain features peculiar to railway injuries. As a consequence, it is only those of long and large experience in this branch of surgery that are really competent to serve as railway surgeons; and those of limited experience have longed for a treatise on this special department to which they might turn for help. The news that such a work was in preparation was doubtless hailed with "great expectations" by others than ourselves. It has at last reached our table, and has been carefully perused from title page to finis. We therefore feel prepared to tell what we have found. Not only prepared to tell, but we feel it our duty to tell to the 2500 railway brethren exactly what is in store for them if they propose to read this work. We would be recreant to our duty were we to eulogize an unmerited work, and equally so to fail in pronouncing the truth of this work.

When we declare ourselves disappointed with the book in toto, we express it mildly. And we feel confident that all who have gone fully into its writings will coincide in the opinion that "the want" is still there—that there is yet a large space to be filled by some writer on Railway Surgery.

The publishers are to be complimented on the style and general get up of the work. It is not a large book, and, on

the ground that "a big book is a big evil," should possess one merit. The actual reading matter covers 283 pages of large, clear type. Of this 283 pages, 121 pages are taken verbatim from other writers, due credit being given in each instance—somewhat of an encyclopediac arrangement of railway surgery. The remaining 162 pages, by the author, give nothing whatever, going to prove the ground taken that there was a want for a special treatise on railway surgery, and, in fact, nothing expressed or implied that is not found in every work on plain surgery. No statistics of his own, no arguments of his own, or comparisons to uphold the idea that railway surgery *per se* should have received any special consideration by surgical authors.

What shall we say of the illustrations? Perhaps Tieman & Co. will do themselves more credit in the next edition by furnishing all aseptic cuts of the nine knives, four forceps and three saws, all staple pattern. The set of "regulation" needles depicted may attract attention if they are replaced by Hagadorn's. Leave out the antiquated spray apparatus altogether. The Esmarch bandage and Levis' splints are sufficiently well known to any graduate, and need only be mentioned, not shown. Not to rob the book of illustrations, let the shoulder and hip-joint amputation cuts remain; they are quite creditable to the brother surgeons who performed the successful operations. The one remaining illustration—a shoe worn by patient of Dr. Outten—does serve well to illustrate the point he desires to emphasize.

There is a frontispiece in the shape of an engraving of Dr. J. W. Jackson, deceased, a much-admired man; but he gets no mention beyond a place in the dedication list in return for the set-off he gives the book. We doubt if his spirit, hovering nigh, will relish the use to which he has been put. Several eulogies were read at the last meeting of the National Association of Railway Surgeons, which could and should have been obtained for this occasion. We suggest this because the author has shown no hesitancy in adopting page after page from the writings of others—on other subjects.

Chapter I—Transportation of Injured Railway Men—or, as might have been expressed, "Transportation of the

Injured on Railway Cars." The essential idea of this chapter is to describe how to place a man on a stretcher narrow enough to go through a car door, and how to rest the stretcher on the back of two seats of a coach, or on boxes in a baggage car. Eight pages are taken up in this chapter, all but a few lines being from a paper credited to Dr. Woods. We do not hesitate to say that this chapter could have been condensed to one-half, and yet have been readily understood by any man of ordinary intelligence; nor would it require any great length of time in training, or severe or prolonged mental effort, to have accomplished the feat without this description. We dare say there is not a cross-railroad doctor who has not had his ingenuity more severely taxed than it would be in concocting this method of getting his patient safely and comfortably removed to an hospital. Agnew dwells, as do other writers, on the importance of care and gentleness in handling the injured.

Chapter II — Temporary Treatment in Case of Railway Injury. We fail to find in the two and one-half pages of this chapter any new recommendations for the treatment of the injured. Morphia; supporting the injured parts; gentle stimulation and warmth—all known, recommended and practiced by all surgeons as indicated for injuries of all kinds. The author relates a case where a trivial injury was apparently followed by profound shock; but it turned out not so much a case of shock as the use of the elixir in "original packages"—certainly seen outside of railway surgery with marked frequency.

Chapter III — Shock in Railway Injuries—covers eight pages, in which the writer defines shock, and says: "When the functions of the various organs are harmoniously and regularly performed, health prevails; but when they are disturbed by injury, the condition of health is changed to that of disease, however sudden the change may be." Surely the disturbance of the system as shown by giddiness, nausea and fainting, on reception of slight injury say to a digit, and from which symptoms the patient recovers in a few moments, is not a *diseased condition?* "The railway surgeon has not so much to do with primary as with the secondary shock." It has

been our experience frequently to get to the patient in time to see the primary shock, and occasionally the patient never reaches the stage of secondary shock. And then comes the announcement: "In the lighter forms of injury the shock is not so great, usually, as in the more serious, such as crushing of a leg or an arm by the heavy machinery of a railway train"!!!!

The gist of the author's views on primary shock are contained in the extract given from paper by Dr. Higgins: "In my opinion, mental impressions are the chief if not sole elements to be considered in connection with the cause of intense degree of shock we so often observe following railway accidents." We heartily agree in the idea that the mental impression produced by the sight of the approaching train, *that passes over his leg*, has *much* to do with the degree of shock which follows. But we do not believe that, however threatening of certain death the approaching engine appears, if it stops short of touching the man, he will die—otherwise let her roll on.

The author says, under head of Remote Effects of Shock, most cases of malingering are *easily* detected; and yet some railway surgeons, conscientious ones, too, find it the reverse. How often are we unable to say, on the witness-stand, this is a malingerer! The liberal use of alcoholic stimulants in treatment of shock is decried, and the views of Prof. J. C. Dalton fully quoted. We cannot subscribe to the 6-drop doses of tr. digitalis nor the ℥th of ℥ whisky, given in the mixture every half hour by the author. Digitalis takes too long "to get there," and such homœopathic frequency of doses disturb the so-much-needed *rest*, for which the doctor appeals by the use of hypo. ½ gr. of morphia. More benefit is obtained by a good full dose of morphia in case of shock than anything that disturbs patient every thirty minutes. Apply your external dry heat, administer half ounce of whisky and let him *rest*.

Chapter IV—Anæsthetics. A paper by Dr. Freeman, read February, 1887, embodying a report of a committee of London physicians and surgeons, 1878. The paper is a good one; but, if we mistake not, chloroform has regained considerable favor as an anæsthetic within the past ten years, since

the remote effects of ether have been more carefully watched. The author advocates ether administered by means of the old-fashioned cone made from a napkin.

Chapter V—Lacerated Wounds. Seventeen pages, thirteen of which are from Dr. Buchanan's excellent paper.

Chapter VI—Fractures. This article, although it covers sixty pages, detailing fractures incident to each bone in the body, fails to present a suggestion outside of Gross, Ashhurst or Agnew, except in that the author advocates trephining the spinal canal in some cases. He is unquestionably sound on this point.

Chapter VII—Amputations. Seventy-eight pages; fifty-seven given to special amputations, with no interest added to what we find in all operative surgeries. On amputations in general, as to proper time to operate (after injury), the author presents the pros and cons, in the shape of two papers—one by Dr. Murdock, advocating the primary or immediate operation; the other by the conservative Outten of St. Louis, Mo., who convinces many that a man can stand a severe operation after reaction better than when in a state of collapse. These two papers, with that of Dr. Buchanan already mentioned, give the cream of the book. The author mildly coincides in the views of Dr. Murdock, as to when to operate.

Chapters VIII and IX—The one on Hemorrhage, the other, Excisions, are brief but present nothing of especial note. Jointly these two chapters cover eight pages. Torsion to control bleeding is not mentioned—hence, we infer, not considered reliable. It is true there are comparatively few surgeons who feel that they can rely on torsion; only one, but he an ardent advocate, supported the procedure in preference to the ligature, at the meeting of the National Association of Railway Surgeons. Yet this work is for general practitioners, practicing surgery, and should be more comprehensive.

Chapter X—Concussion of the Brain. One of the most readable of our surgical writers is Agnew—aye, we confess to a charm about his descriptive powers, and especially clear is he on this subject, concussion of the brain. The author of this work on railway surgery gives Agnew due credit for

upward of a dozen lines in this chapter. But when we take the subject as presented by the two men, Agnew and Stemen, and compare them, paragraph by paragraph, we find Agnew has been abbreviated, some sentences shortened, and only a few lines added. Many sentences are the same, but occasionally the author of the new work attempts to change the style of expression. and without bettering it. Agnew says, "If deglutition is unimpaired, a little warm water or warm tea may be administered from time to time. The common practice, prompted by the anxiety of friends, of at once administering brandy or whisky, cannot be too strongly reprobated, etc." Stemen—"If deglutition is unimpaired a little tea or coffee may be administered, but the writer cannot too strongly condemn the unfortunate yet common practice of administering brandy, etc." We are forced to conclude that the new author had not only read Agnew but had him wide open before him as he wrote.

Chapter XI—Compression of the Brain. Agnew creeps steadily to the front, idea for idea. In the two chapters we find Agnew differed from in only one point, throughout the arguments, definitions, symptoms, diagnosis, prognosis, and treatment, and that is, warm applications are substituted for cold to the head in cerebral inflammations.

Chapter XII—Burns and Scalds. The author presents nothing particularly attractive in the short chapter, except he adds less than ⅛ of a grain of cocaine to the ounce of carbolized linseed oil and lime-water. A 1:720 solution of cocaine. We protest against homœpathic doses of pain-killers in local surgical medication.

Chapter XIII—Color Blindness. Is thoroughly practical and explicit. One-half of the article is a description of tests for detection of color blindness—by C. A. Oliver, M.D.

Chapter XIV—Injuries to the Hands and Feet. This is a very practical article and well worthy of perusal. Its chief relation to railway surgery is the frequency with which injuries to these regions occur in railway practice. Dr. Wood of Ohio presents an excellent method of retaining dressings on injured fingers and protecting them from further contusions.

Chapter XV — Railway Concussion of the Spine. This subject is handled mostly through extracts from writings by Wm. A. Hammond, U. S. A., Mr. Erichsen of London, and an excellent paper, "Surgeon's Duty in Railway Spinal Injuries," by Dr. Mathews of Ill. The author urges a thorough detailed examination of every case of spinal injury.

But even with such extracts as are given, amounting to twenty-five out of the thirty-four pages, the reader is left in anything but a decided state of mind as to whether concussion means concussion, or includes extravasations, pressure from inflammatory effusions, or what not. The term itself is misleading (for which the author is not solely at fault), and we think should have been changed to concussion of the spinal cord and treated of under head of injuries to the spine, just as concussion of the brain is treated of under injuries to the skull—and not included under "concussion of the skull." There is much difference of opinion among men of experience of the present day, as to whether the spinal cord can be so shaken or concussed by indirect violence (with no actual demonstrable physical lesion of any of its fibres or cells) as to produce the train of symptoms often alleged. We have read and reread this chapter with the hope of untangling the warp in our own mind, on concussion of the cord. We lay no claim to acuteness of perceptive faculties, and humbly confess ourselves very much in the same state of mind that the Class of '77-8 at Bellevue found themselves at the close of Prof. Brown Sequard's special lectures on the nervous system, when by eight lectures, recitals of cases of brain tumor, softening, etc., he knocked our worthy Flint's teachings in physiology of the nervous system into a cocked hat. We doubt not that all the author advises is correct, all quoted is true, but there is wanted a something, to put you on to concussion of the spine, its symptoms, pathological anatomy, diagnosis and treatment.

We don't yet know what is railway concussion of the spine, and feel tempted to ask why railway dislocations were omitted in this work on railway surgery.

Chapter XVI—Transfusion is a paper by Dr. McCurdy describing the intervenous injection of saline solutions per

open-mouthed veins after amputations, where the patient has suffered much hemorrhage. The article is good and practical, but *transfusion* of blood is not given.

Chapter XVII—Aneurism. This article is a report of an interesting case of aneurism of the femoral artery, by Dr. French. To the general practitioner, practicing surgery, you will have to study the subject elsewhere; to the railway surgeon, you can skip this chapter. We protest against this chapter being headed aneurism—it is a hoax.

Chapter XVIII—The last. The Method of Taking Care of the Sick and Injured on Foreign Railroads. The writer of this book has placed it before the profession with a title calculated to make it sell, and doubtless many hundred copies have already gone forth, and the dollars have come in in exchange. But with all the wisdom shown in the selection of the title, it is surprising to us that this chapter should have been placed last. In future editions, it should be changed, for with the prosy matter contained in the previous seventeen chapters, we venture the assertion that the author's travels in foreign lands will never be known to but few such damphools as ourselves who have waded drearily through to finis.

ADVANCES IN RECTAL SURGERY—A RESUME.

Read in the Kentucky State Medical Society at Henderson, May 15, 1890.

BY JOSEPH M. MATHEWS, M.D.

Professor of Surgery in the Kentucky School of Medicine.

It has occurred to me that I could best serve the society by a short resume of the advances in rectal surgery, rather than by any extended report on a special subject.

Along with the rapid revolution in surgery in the last half decade, those interested in the special surgery of the rectum have kept pace. Although it was thought at first that antiseptic precautions would avail but little in the treatment of these diseases, experience has taught different. In the laying open of fistulous tracts, opening of abscesses around the rectum, in the operations for hemorrhoids, removing cancer,

and especially in doing inguinal colotomy, antiseptic surgery has been a boon.

Hemorrhoids. Since the last meeting of this society the new operation for internal hemorrhoids, known as *Whitehead's*, has been fairly tried, and judged in comparison with others. A few, notably Dr. Marcy of Boston, favor it above all others. The majority of those having experience in rectal work do not think well of it as compared to other and older methods. Among the latter may be mentioned Allingham, Kelsey, Andrews, Cook, and a host of other authorities on this subject. I fully and emphatically concur with the latter class. The operation consists in the radical excision of not only the hemorrhoidal mass, but the entire hemorrhoidal plexus. Taking it for granted that the fellows are familiar with the technique of the operation, I submit the following as my reasons for opposing it:

1. That the operation meets the demand in but few cases.

2. When it is considered that a large proportion of subjects are unable to take an anesthetic, that some danger is always risked in giving an anesthetic, and that the necessity is absolute in doing this operation to administer it, other methods should be selected which do not require their use.

3. As a full and complete paralysis of the sphincter muscles is required in order to do the operation, a great risk is run of injuring the muscles, thereby inducing incontinence of fæces, therefore in the majority of cases it would be best to adopt a method that does not require such a procedure.

4. In that large blood vessels have to be divided, and the rectum a difficult place to secure arteries, the operation can be called a difficult, bloody, and tedious one.

5. If union by first intention is not had, as in strumous diathesis, the wound would be a large suppurating one and sepsis resisted.

6. The operation is not considered complete until the whole hemorrhoidal plexus is removed. I submit that this involves an unnecessary amount of surgery, and that the author's conclusions for such recommendation are based upon a wrong premise.

7. In view of the fact that the vessels are tied during the operation, and that the parts are diseased, secondary hemorrhage could be easily induced and is a dangerous condition, especially in the rectum.

Fistula in ano. In a former paper I called attention to the fact that Dr. Lange had suggested the laying open of fistulous tracts and bringing the edges together to get union by first intention. The operation to be done under strict antiseptic precautions. The plan has proven eminently successful in selected cases. The elastic ligature in the treatment of fistula cannot become universally popular for the reason that it must of necessity fail to cure many cases. At the last meeting of the Mississippi Valley Medical Association, I had the honor to report a number of cases of fistula in ano cured by an instrument of my own device. Mr. Tafel has succeeded in perfecting the instrument, and reports from those who have used it in the selected cases detailed, confirm the idea that it is a simple method of cure, especially in recent cases having but one sinus. I can safely report, however, that when either one of these methods is contrasted with the knife in the general treatment of fistula, they must suffer by the comparison.

Neuralgia of the rectum. Pain in the rectum without any appreciable disease, has been variously denominated neuralgia, nervous, or hysterical, in nature. Having already placed myself on record as believing that in all such there is some lesion or pathological change, I simply desire to call attention to a simple way in which I have treated some cases lately. It is the universal custom to treat neuralgic affections by the application of heat, as the hot douche, etc. Several of my cases have been materially relieved by substituting cold, instead of hot water, as an injection into the rectum.

Pruritis ani. This, as we all know, is the most intractable of all rectal affections. I had learned to rely principally on the local application of tinct. iodine, pure carbolic acid, or a strong bichlor. hydgr. ointment. Lately I have used with the most decided benefit, a new candidate for favors—Campho-Phenique. As a vehicle I am in the habit of prescrib-

ing with it the benz. oxide of zinc oint. in the following way: ℞.—Benz. oxide zinc oint.; Campho-Phenique aa ʒss. M. Apply as often as necessary.

I frequently apply the agent, however, in its pure state, with no detriment to either the skin or mucous membrane, but with much benefit in eradicating the disease. Itching frequently disappears under its influence as by magic.

Cancer of the Rectum. The excision of cancer of the rectum has become one of the legitimate operations in surgery. According to Cripps the mortality following the operation is about seventeen or eighteen per cent. of the published cases. I am sure that a correct average would be greater than this. His statistics must have included the removal of indiscriminate growths from the rectum. A table prepared from the mortality of actual cases of malignancy would be a much higher per cent. Most of the deaths followed as a consequence or result of the operation. That is, from direct sepsis, as by peritonitis, erysipelas and suppuration. The truth is, however, that in the majority of cases operated on, all of the growth is not removed, and the patients die of the actual disease. Antiseptic precautions observed in doing the operation will do much to lessen the mortality rate from the diseases incident to sepsis. In the *Medical Mirror* of April, 1890, I recorded a case of the extirpation of an immense carcinoma from the rectum, with beautiful results. I attributed the success in the case to the observance of strict antiseptic rules during the operation.

Colotomy. Since the introduction of antiseptics into surgery, colotomy has been brought forward as a justifiable operation for many conditions. Among these can be named stricture of the rectum, fæcal collections, volvulus of the descending colon, invagination of the transverse colon, pressure upon the rectum by morbid growths, congenital malformations and cancer. Inguinal colotomy has again been brought to the front and is being strongly urged as the proper end to the old and established method of opening the colon in the lumbar region. It is claimed by Mr. Allingham, sr., that, under antiseptic surgery it is just as safe to do the Lit-

tre as the Amussat operation; that the operation fell into disrepute simply because it was considered unsafe to cut into the peritoneal cavity, and that now all fears are dissipated. It is also claimed for this operation that it can be performed with greater ease than lumbar colotomy; in that the bowel is sooner reached, and that it is a more suitable position for the artificial anus. Mr. Thomas Bryan, on the contrary, argues strongly in favor of the lumbar operation, and refutes by clear reasoning, many of the so-called objections to this method. It is not the purpose of this paper to discuss the question pro or con, but it is safe to say, that with English and American surgeons, only one operation—lumbar colotomy—is looked upon as justifiable. The revival of the inguinal colotomy by continental surgeons has attracted considerable attention, all based upon the idea that antisepsis will render the operation just as safe as the lumbar.

It does not seem at all plausible to say that with any method of operating, as much safety can be had in opening the peritoneum as in not opening it. If antiseptic surgery makes inguinal colotomy so very safe, why is it not logic to say that it also renders lumbar operation doubly safe, as compared with other ways? The statistics analyzed by Erckeleus show that in inguinal colotomy the death rate is ten per cent. greater than in lumbar colotomy. It appears, then, that one would have to wait for a collection of cases done under antiseptic rules, before being persuaded that the claims set up for inguinal colotomy can be substantiated.—*Med. Prog., July, '90.*

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GYNECOLOGY.

EDITED BY
T. J. CROFFORD, M. D.
Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

NEW YORK LETTER.

NEW YORK, Aug. 25, 1890.

Having returned from a hot and dusty trip to Boston and its historic vicinity, I have been looking around in New York for something of interest with which to fill a few pages in my department of the JOURNAL. The more closely I observe the aspect of things, the more I am prepared to appreciate that "the history of medicine is but the history of its dogmas, hypotheses and theories." This seems to have been so from the founding of the Alexandrian school three hundred years B.C., to the present time. As the rationalists, empirics, humorists and solidists have each grown up, flourished and gone down, so is decay surely written upon many things taught at this time. Disuse or decline, however, is not always a proof of error, but a want of adaptability to the times which are supervening—a failure to harmonize with the fashion of the day.

There never was a time when good common sense was more in demand than at the present. The reason why medicine has had so many adverse dogmas to combat, is because extreme ideas without a basis of common sense have crept in upon us. Just as long as we accept teachings without carefully weighing them, just so long will we be compelled to retrace our steps or keep pruning and eliminating. The extreme in one direction will surely ultimately drive toward the opposite. Large dosage and exhaustive bloodletting were the causes of Hahnemannism. The abuse of mercury gave rise to the Thompsonian system. Whilst the profession, owing to the greater enlightenment of this age, is not likely

to be guilty of the extremes of the past, yet the same tendency can be seen in the actions and reactions of this time; although gilded over by the greater culture and tempered by broader views, yet it is the very same thing; the vibrations which have become the mild oscillations of today are but in miniature the actions and reactions of a more savage age which built and buried schools and systems.

Listerism was based upon the assumption that the atmosphere was filled with germs capable of doing great harm if allowed to come in contact with raw or wounded surfaces; hence, germicides and antiseptics became popular. They have been abandoned gradually, as we have realized more and more that cleanliness and not the exclusion of germs was the cause of the better results. I do not know a surgeon of repute who would forego cleanliness for any amount of antisepsis. I do not know a surgeon who uses antiseptics in the abdominal cavity. The reaction has been so great that antisepsis is only used to promote cleanliness. In the reaction antisepsis has given place to asepsis.

A revolt against the reckless abdominal surgery of a few years ago is no less evident, and many honest surgeons would gladly undo many things they have done if it were only possible. I saw Prof. Gerster at Mt. Sinai refuse to open the abdomen of a woman because the temperature had declined, hoping to abandon the operation entirely. I doubt if this would have been done two or three years ago. I saw him open the abdomen of a women which presented an enlargement in the right umbilical and inguinal region. This enlargement was due to a collection of one-half gallon sero-purulent fluid. The cause of the inflammation giving rise to the collection could not be positively ascertained, but it was likely due to appendicitis. The sac or cavity containing this large collection was formed by intestinal agglutinations and adhesions shutting off the remainder of the peritoneal cavity.

Whilst my mind was running over the actions and reactions of a few years, deploring the everlasting unsettlement of things, and wondering if this fermentative restlessness would ever cease, I bethought myself of how little we really know, and asked myself the question why is it that in

this case the inflammatory products become encysted, and in another case extend over the whole of the peritoneum? What was there about this case that caused a sac to be formed within a sac? Does it not appear that there are two kinds of inflammations essentially differing from each other in character? Is there not a reparative peritonitis as well as a destructive variety?* Modern surgery is indeed brilliant, and pathology has made great strides, but have not our advancements been in one direction? The more we know, the more we can see that we do not know.

It has been only two or three years since vaginal hysterectomy for cancer was the rage. Two months ago Dr. H. C. Coe, pathologist to the Woman's Hospital, wrote an article virtually condemning the operation. This article not only expressed the views of Dr. Coe, but was backed by letters from many of the most eminent gynecologists in the United States, to a great extent reliuquishing the radical operation in favor of the high amputation devised by J. Marion Sims, some years prior to his death. It will doubtless be remembered by some of the readers of this JOURNAL that this position was taken by the writer three years ago at the meeting of the Tri-State Medical Association, when a distinguished gynecologist read a paper upon this subject. There can be no doubt but there is a place in surgery for vaginal extirpation of the womb (viz., carcinoma of the glands of the body of the organ), yet many women have been subjected to the more dangerous operation when a cancerous spot was upon the cervix, when amputation would have given all the immunity of the more dangerous operation.

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* A most interesting investigation of the conditions under which infection of the peritoneum can take place has been made by Grawitz ("Statistischer and experimentell. pathologischer Beitrag," *Charite Annalen*, B. xi. p. 770). From his own experiments he came to the conclusion that the injection into the healthy peritoneal cavity of schizomycetes, pyogenic as well as non-pyogenic, produced no unfavorable results. Peritonitis was caused only when the microbes were mixed with a caustic fluid, or when the peritoneal cavity contained a fluid which could serve the purpose of a nutrient medium; also, when the amount of fluid injected exceeded the absorbing capacity of the peritoneum; or, finally, if the peritoneum was injured at the same time, or the abdomen was opened by a penetrating wound. Strange as it may appear, he claims that the injection into the peritoneal cavity of intestinal contents caused no peritonitis as long as the punctured wound remained aseptic.—*Senn's Surgical Bacteriology.*

Dr. Nathan Bozeman, sr., who has given a great deal of study to chronic pyelitis, now treats it very successfully by Kalpo-uretero cystotomy, which makes possible irrigation of the pelvis of the kidney. For the purpose of obviating the discomfort of the fistula incident to this operation as well as vesico-vaginal fistulæ in general, the doctor, two years ago, invented the instrument shown in the accompanying cut which keeps the urine drained away, preventing phosphatic incrustation in the bladder and vagina, and at the same time furnishes support to the uterus and bladder. The accompanying cut does not represent the improved instrument, but is taken from that of two years ago, there being none out, as yet, representing the latest change.

Utero-Vesical Drainage Support.

The improvement in his utero-vesical drainage support, one year after publishing his first account of it, was made by introducing a small tube, ⅛ of an inch in caliber, just posterior to and underneath the neck of the instrument, which extends to the bottom of it and projects outside, parallel to the neck, sufficiently for the attachment of a soft rubber tube. The latter forms the long arm of a siphon by which the instrument is emptied intermittently whenever the patient is in the recumbent posture. This siphoning is facilitated by raising the upper half of the mattress upon which the patient is lying about two inches higher than the lower half. The respiratory movements, also, it has been observed, starts the siphon even

before the instrument has filled up with urine. On account of the two soft rubber tubes attached to the instrument, a Y-shaped connector is introduced into the top of the urinal to join them. The valve, with which every soft rubber urinal is provided, has been discarded, because it offers obstruction to the flow of urine into it. A long rubber tube takes its place, which permits the air to circulate back into the instrument after it has been pumped out by the intermittent siphon, or carried down with the urine when the patient is in the erect position, thereby preventing suction on the tissues.

Many cases of chronic pyelitis and cystitis demand the making of a vesico-vaginal fistula. Then there is no small amount of trouble on your hands for the year or two to come. I have tried all sorts of devices for keeping the urine from excoriating the parts, and in my hands all have been, to a great extent, failures; and it is to be hoped this instrument of Dr. Bozeman's will succeed in bettering the condition of this uncomfortable class of patients. The Dr. has treated twenty-five cases with the instrument, and declares that it is with difficulty he can induce many of them to submit to the operation of curing the fistula, so comfortable are they.

In order to abridge the time of treatment and add still further to the comfort of these cases with fistula, Dr. Nathan Bozeman, jr., has devised a self-exhausting irrigating catheter. The double-current catheter, or irrigating tube, which he has been using for some time, was originally devised for treating chronic cystitis in women after a fistulous opening had been made in the bladder, for free drainage and physiological rest of that organ. As the assistant of his father, Dr. Nathan Bozeman, he carried out this treatment under his directions in a great many of his patients, hence the excellent opportunity for perfecting the instrument. By its use medicated fluids can be sprayed against the distended walls of the bladder in very fine jets, and be quickly removed, together with the urine, as fast as it accumulates in the most dependent portions of its cavity. The patient being in the supported knee-elbow position, or on the side, douching of the organ can thus be accomplished without wetting the clothing or causing vesical tenesmus.

The instrument consists of an outflow tube and supply tubes, which are made of silver or hard rubber, and a handle for convenience of manipulation. The four supply tubes, each having a caliber of one-sixteenth of an inch, are attached along the sides of the outflow tube. They are provided with small lateral openings near their closed extremities. The outflow tube has a caliber of three-sixteenths of an inch; it is conveniently curved, and at the junction with the handle it is bent downward at right angles. There are also lateral openings near its closed end. United to the short portion of the outflow tube, which is bent downward, and parallel to it, is a tube having a caliber of one-thirty-second of an inch; it projects upward sufficiently to form a connection for a soft-rubber tube. Suspended from the open end of the outflow tube and the lower end of the short vertical tube, is a series of small coils of glass tubing, united one above the other by soft rubber tubing, and from the lowest one hangs a long rubber tube. The handle is rounded, and is four inches long, and at its extremity it is provided with a ring and steel clamps for compressing two soft rubber tubes.

When he uses the instrument for washing out the bladder, the curved extremity is passed into its cavity through the fistulous opening in the vesico-vaginal septum, the patient being in the supported knee-elbow position, with the perineum elevated by a perineal retractor. In this position, and under these conditions, the bladder is usually distended, and the extremity of the catheter can be moved about in its interior, barely touching its walls. Now the irrigating fluid is allowed to flow into the instrument by freeing the two rubber tubes from the clamps which compress them. A very small portion of fluid passes directly into the coils of glass tubing, collecting in them and partially filling them, when it is precipitated *en masse* downward, carrying air with it, which is exhausted from the outflow tube. And the fluid which collects from the fundus of the bladder, after having been sprayed against its walls through the small openings near the extremity of each of the supply tubes of the catheter, is steadily drawn up and evacuated.

Self-exhausting Irrigating Catheter, drawn one-half size, also a median longitudinal section of the same, without the handle. The arrows indicate the directions of the currents.

The Dr. finds for irrigating the bladder that two glass coils and a rubber tube suspended from them, twelve inches long, produce sufficient exhaustion. A continuous return current through the outflow tube of the instrument is thus kept up, and all the fluid, after lavage of the bladder, is emptied automatically in a vessel placed on the table between the knees of the patient.

The deep grooves along the catheter were intended to serve as tubes when the mucous membrane comes in contact with them, in the expectation that through them air would be drawn into the instrument, thus preventing the sucking in of the mucous membrane, and the occlusion at times of the openings in the outflow tube. This often did occur, so the Dr. was compelled to cut off one of the supply tubes and establish a permanent communication with the air, through it, with the inside of the outflow tube on a level with its lateral openings. Any possibility of suction on the mucous membrane is thus prevented.

The employment of continuous suction in a very simple and efficient way in the application of this catheter, makes it different from any of the double-current catheters that have been devised. Besides the use for which he had devised this instrument to be intended, he had employed it with great satisfaction for irrigating deep sinuses and pus cavities. During the operation for closure of urinary fistula, in the supported knee-chest position, it is invaluable for keeping the cavity of the bladder and the wound free from urine and blood.

The junior Dr. has treated twenty cases, and thinks it valuable not only in shortening the period of treatment, but avoids the pain and tenseness of the ordinary catheter or syringe.

The most interesting of the forthcoming books is the Biography of Ephraim McDowell, the "Father of Ovariotomy," edited by his granddaughter, Mrs. M. Y. Ridenbaugh, which is now in the hands of the publisher, Mr. W. J. Dornan of Philadelphia, and will be issued in the course of a few weeks. The volume, of nearly six hundred pages, embodies the private life of this truly great man, together with his several publications upon this original operation, showing the triumphs of science and skill from which already in little over two generations, thousands of years of life, usefulness and happiness have been vouchsafed to suffering women. The work will also contain in addition to the features named, and eulogies from the pens of eminent living authors in the profession, the history of ovariotomy in the United States, France,

Germany and Great Britain, from 1809 to the time of the revival of the operation in 1842 and '43; together with a sketch of old incisionism in the same countries from 1701 to 1809. Nathan Bozeman, sr., M.D., of New York, is the contributor of the history of the subject as indicated, and this portion alone of the volume reaches 217 pages. The writer, in his introduction, which he read before the New York County Medical Association, May 19, 1890, uses these words, from which some idea of the scope of his labors may be learned:

"Having concluded our general survey of the subject before us, we are now better prepared to appreciate the historical facts to be brought out more in detail and commented upon.

"The plan, as foreshadowed, will be to divide the subject into four sections, corresponding to the countries referred to, commencing with the United States. Naturally, this brings us first to the presentation of McDowell's eight cases, five of which are copied in full, with abstracts of criticisms upon his operation and quotations from the same, together with answers and comments thereupon by himself. Of the remaining three cases the facts presented are based upon the highest authority."

The method of cutting into the tumor by means of a short incision below the umbilicus, not for removal but for the purpose of letting out the contents and leaving the woman to live or die as blind chance might decide, was in vogue from 1701 to 1809, when the genius of McDowell conceived the idea of making a long incision for the purpose not only of determining the shape and character of the tumor, but in order that its adhesions might be determined, and above all, its entire removal facilitated. It was in this particular that McDowell's operation differed from all others. Dr. Bozeman has traced the operation a few years later into Germany, France, and England, and shown the earmarks of McDowell through all these countries in spite of the jealousies and denials. When we consider the fact that certain ambitious surgeons have dated forward McDowell's operations and publications, dating back their own, and in many other ways*

* Dr. Nathan Smith of Dartmouth College, N. H., operated in 1821 and gave no credit to McDowell, notwithstanding his paper with a report of his cases had appeared in a leading Philadelphia journal in 1817.

tried to cheat and rob this modest surgeon of his justly-earned glory, the necessity is apparent for someone prepared like Dr. Bozeman to enter the field, go beyond all the histories that have been written, and bestow honor where it is due.

Dr. Bozeman has grouped all the methods of cutting into the tumor under one head, which he aptly calls "Incisionism." He shows its rise in 1701, its fall in 1809, and forever settles the question that the first ovariotomist was Dr. Ephraim McDowell of Kentucky. T. J. CROFFORD, M.D.

DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

EDITED BY

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Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

THE RELATION OF REFRACTION AND INSUFFICIENCY OF THE OCULAR MUSCLES TO FUNCTIONAL DISEASES OF THE NERVOUS SYSTEM.—The conclusions reached by Dr. D. B. St. John Roosa, after a lengthy article devoted to this subject, are:

1. The eyeball of the human race is very rarely in what might be defined as an entirely emmetropic condition.

2. Perfect equilibrium of the ocular muscles is by no means a common condition, even among persons of sound health and without asthenopia.

3. Defects in these two states by no means necessarily produce even local disturbances, such as are comprehended under the term of asthenopia, inflammation of the edges of the lids, etc., although high degrees of hypermetropia, moderate degrees of astigmatism and all cases of mixed astigmatism are apt to do so, sooner or later.

4. Asthenopia depends chiefly upon two sets of causes, nervous exhaustion and uncorrected errors of refraction.

5. In estimating the influence of these defects, great stress should be laid upon the general condition, and the line sharply drawn between asthenopia due to exhaustion and that to faulty refraction.

6. Nothing has been added essentially to Donder's discovery of the fundamental cause of accommodative asthenopia, except that astigmatism forms a more important factor in its ætiology; muscular asthenopia falls into the background, while the definition of asthenopia has been much amplified by ophthalmologists.

7. The origin of a class of such diseases, as chorea, epilepsy and hystero-epilepsy, has not been found in errors of refraction, nor in insufficiencies of the muscles of the eyeball.

The observing general practitioner is able to test the truth of this latter proposition as he looks among the neurotic families and individuals of his acquaintance, and observes whether or not the use of glasses and ocular tenotomies are beginning to lessen the cases of chorea and epilepsy. Certainly a discovery, which it was predicted would vie with those of Jenner and Lister, has been proclaimed with sufficient fullness and clearness, and has been acted upon in an arena large enough to allow us to judge by this time whether it is an advance in rational and scientific therapeutics. I do not believe that it is, but that the theory of the ocular origin of nervous disease, by distracting attention from the evident, and in some instances preventable, causes of neuroses, has delayed our progress and inflicted serious damage to the reputation of our profession for accurate observation and philosophical conclusions.—*New York Medical Journal.*

Legislation to Prevent Blindness.— The Legislature of the State of New York has passed the following law:

Section 1. Should any midwife or nurse, having charge of an infant in this State, notice that one or both eyes of such infant are inflamed or reddened at any time within two weeks after its birth, it shall be the duty of such midwife or nurse so having charge of such infant to report the fact in writing within six hours to the health officer or some legally qualified practitioner of medicine of the city, town or district in which the parents or the infant reside.

Sec. 2. Any failure to comply with the provisions of this act shall be punishable by a fine not to exceed $100, or imprisonment not to exceed six months, or both.

SEC. 3. This act shall take effect on the 1st of September, 1890.

It is estimated that blindness can be reduced about one-tenth by the enforcement of this act.

NAPHTHALIN AND CATARACT.—Dr. Kolinski, writing in Von Græfe's *Archiv*, Band XXXV. 2, points out that naphthalin, which is coming a good deal into use from the powerful effect it seems to have on the micro-organisms existing in the intestines in some cases of diarrhea, possesses also the property of producing changes in the nutritive power of the blood, thus being liable to set up degeneration of the blood vessels. As the eye is one of the most highly vascular organs, it is one of the first to show any of the changes induced by interference with the nutritive property of the blood. Naphthalin is said, first, to cause small extravasations in the choroid and in the ciliary body, then ecchymoses and white patches in the retina, and finally cloudiness in the lens and crystals in the vitreous.—*Lancet.*

STAMMERING AND DEAFNESS.—Stammering has hitherto been supposed to be purely a nervous defect. Some experiences recently acquired by the surgeons connected with the Ear Hospital, Soho Square, tend to call this view more or less in question. In carrying out certain operations to cure children of deafness, it was found that in several successful cases the operators had also simultaneously cured the patients of stammering. This fact attracted special attention and study, and the outcome has been the firm conviction that stammering, in the majority of cases, does not proceed from a nervous malady, but from some obstruction or defect connected with the organs of hearing. In a number of cases selected purposely from the public schools this fact has, it is said, been abundantly demonstrated.—*St. James Gazette.*

TO REMOVE FOREIGN BODIES FROM THE THROAT.—Dr. Beveridge, of the British navy, says that for the removal of foreign bodies in the throat, such as pieces of meat, etc., a simple mode of relief is to blow forcibly into the ear. This excites powerful reflex action, during which the foreign body is expelled from the trachea. The plan is not a new one, but it is easy of execution and should be remembered.—*Brief.*

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Secretaries of medical and surgical societies will favor us by sending dates of regular meetngs, with brief programme of important subjects coming before the meeting.

All matter must be in our hands on the tenth of the month preceding its publication.

The JOURNAL will be issued on the fifth of each month.

All communications other than provided for above, should be addressed to

JAS. L. MINOR, M.D., Editor,
Memphis, Tenn.

WM. KRAUSS, M.D., Business Manager.

CORONERS' INQUESTS AND POST-MORTEMS.—The old-fashioned plan of coroners summoning a jury of indifferent, nay, even ignorant people, to decide that a subject came to his death from natural causes, when no external marks of violence are found, still exists in most of our States. In only one State—Massachusetts, we think—this has been done away with. Physicians appointed for the purpose are summoned to make an examination, and, if a post-mortem is deemed necessary, it is made. In an article in *Harper's Monthly*, by Dr. Abbot, which is unfortunately not at hand, it is shown that the new arrangement not only works more satisfactorily, but is an actual money saving over the old plan. It is clearly apparent that this is the only rational way of dealing with the question. Why a coroner, who has usually no knowledge of medicine, and a jury who have none of any kind, should decide the question of the cause of one's death, is one of the anomalies of our public institutions, hard to comprehend. One of the reasons for the continuance of this system is the obstinate resistance of friends of deceased and the deep-rooted prejudice against post-mortems in general, on the ground that it is barbarous to "mutilate" a body. The old prejudice has long since been overcome in all other civilized coun-

tries and in the larger cities of this country. People are even anxious to have post-mortems done on their friends to ascertain the cause of death. In Germany the law requires post-mortems on all persons when the cause is not definitely known, even when a physician has been in attendance. With us, however, the old objection lingers with a tenacity worthy of a better cause. It is difficult to estimate the number of foul deeds covered up; the many interesting cases lost to science, and amount of hindrance to progress of medicine, all because of a false sense of humanity, which would rather have bodies decay beneath the sod, where they only serve as food for worms, than give us the means of preserving life from the experience thus gained. It is hoped the medical press will interest itself in the cause of justice and true humanity, and urge upon our law-makers to give us a much-needed reform. Let us have no more such verdicts as this: "And he came to his death by fowel play, caused by himself." W. K.

THE Tri-State Medical Association of Alabama, Georgia and Tennessee meets in Chattanooga, Oct. 14–16, in Turner Hall. The outlook is good both for a large attendance and a fine lot of exhibits. Reduced rates of one and one-third fare have been secured by the committee on the railroads. Authors of papers should send titles to the secretary, Dr. Frank Trester Smith, Chattanooga, Tenn., before Sept. 15.

DR. J. C. MINOR, late of Walnut Ridge, has moved to Hot Springs, Ark., where he can be found over Blake's jewelry store. We wish him, and predict, much success in his new field.

ORKNEY SPRINGS.—We would call special attention to this deservidly popular summer resort, and commend it to all who ask a healthful and pleasant change. The air is pure, the waters alterative, the climate perfect, and the hotel is superbly kept.

THE

Memphis Journal of the Medical Sciences.

MEMPHIS, TENN., OCTOBER, 1890.

DEPARTMENT OF

PRACTICE OF MEDICINE & THERAPEUTICS.

EDITED BY

B. G. HENNING, M. D.
S. A. ROGERS, M. D.

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STATE REGULATION OF THE PRACTICE OF MEDICINE.

JAMES L. MINOR, M.D., MEMPHIS, TENN.

As natural philosophy teaches that opposition must be overcome before any physical change can occur, so does history teach that advance in man's estate, thought or teaching, meets with opposition.

Opponents come from every rank. The drone who sips the knowledge gathered by others is satisfied, and desires the usual routine; the pessimist sees no good in anything, and opposes any change; the skeptic, slow to recognize the advantages of a change, opposes it; the theorist gives play to his imagination, and pictures dire results; individual interest in, or sentiment for, and old custom, prompts opposition to innovations which curtail its usefulness; the honest believer in an old doctrine clings to it because he thinks it best—the creed under which he was reared is made dearer to him as attempts are made to overthrow it; he becomes blind to reason which would at other times convince, and assumes the defensive.

As such opposition must be met and overcome by every advance, it is not surprising to find the reform which is being made throughout this country in the practice of medicine, vigorously opposed by many in and out of the profession.

The charge is made that governmental regulation of the practice of medicine is unjust; and the right of the State to do so is questioned; the policy of imposing restrictions which will debar anyone from following the profession of medicine, it is claimed, is an infringement upon the inalienable rights of a free American citizen; they insist that the right to practice medicine should be granted to anyone who desires to do so, regardless of qualification—and the same freedom of choice in selecting a physician is demanded for the public. Physicians advocating the passage of laws which will make knowledge of medicine a requisite to practice, are accused of selfish and avaricious motives; quackery is said to be concealed by licenses granted to practice medicine, and modern civilization is called upon to relegate to oblivion all laws which now throw their protecting arms about the practice of medicine.

That all governments have imposed restrictions upon their inhabitants when the general good demanded it, must be taken as proof of their wisdom and of their right to do so. If an individual has suffered, the act has been justified by the benefit to the community. Hence the interests of the community and not of the individual are considered. What is true of a government is true of a state or a county, of an organization or a corporation. The voter is not allowed that franchise until certain restrictions are complied with; nor can office be held without them; certain requirements are made of the lawyer before he is allowed to plead in the U. S. Supreme Court, and in many States he must pass an examination before he is allowed to practice his profession; the pilot must meet certain requirements before obtaining the license which entitles him to take charge of a vessel; the boiler inspector must show his efficiency before his avocation is followed; the engineer must demonstrate his capacity before he is allowed to take charge of his machine. And so on, instances might be multiplied to show not only that one who accepts a trust assumes responsibility, but, that as safe-

guards, restrictions are imposed to serve as a guarantee for the faithful performance of an accepted trust.

Of the 65,000,000 inhabitants of the United States, 1,500,000 die annually, and 3,000,000 are constantly suffering from sickness. This trust of human life and physical suffering is in the keeping of the physician, and the only guarantee of its faithful administration is professional knowledge. Can any one question the right of the State to require that all who follow this profession shall have sufficient knowledge to practice it intelligently? Is there any injustice in placing restrictions which make knowledge a test of fitness to practice that profession which ministers to the health of the individual from birth to death; combats and prevents disease; directs the sanitary condition of a community; prevents epidemics and controls the health of a country?

Is anything more natural than the act of the physician, who, appreciating the importance of this trust, labors for the advancement of his profession, through the passage of laws which will place a premium on intelligence and weed out ignorance? No class of men devote more time and study to the advancement of their profession than do physicians. No calling requires more self-sacrifice, none contributes more largely to charity; and to charge them with selfish and avaricious motives in their endeavors to obtain a higher standard of educational qualification, is malicious slander.

The study of medicine is free to all; the practice of it should be limited to those who are qualified to follow it.

Freedom of choice in selecting physicians is not denied the public; but that there should be some discretion used in assuming the role of physician, and some guarantee that the title of physician carries with it a knowledge of medicine, was fully demonstrated in Brooklyn recently, when the Court held that the death of a patient from diphtheria was due to the negligence of a faith-curist, and those who had placed and continued the patient under that treatment.

To say that quackery is concealed by licenses granted to practice medicine, begs the question. No one will deny that some excellently posted physicians are guilty of quackery; but that is the fault of the individual, not of the profession

or system, and as the quackery of an intelligent physician is less apt to cause serious results than that of the ignorant itinerant, no ground for argument against granting licenses is furnished.

Modern civilization, far from relegating to oblivion, the laws restricting the practice of medicine to such as are qualified to follow it, is marching rapidly in the other direction. All European nations, all English provinces, Mexico and some South American countries, have laws whose aim it is, to limit the practice of medicine to such as are qualified to do so; and the latest statistics at hand (1889) show that thirty-three out of thirty-seven States, and six out of ten territories, in the United States, have similar laws.

TETANUS DUE TO DIRECT INFECTION.

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Professor of Surgery in Texas Medical College.

That tetanus is due to a specific or organized virus is one of the best proved facts in pathology. The germ is well characterized, experimental vaccination gives positive results, and the poisonous products of the germ can even be isolated. The possibility, however, of so-called idiopathic tetanus cannot altogether be refuted, because the same symptoms may appear as consequences of perfectly different pathological processes, say, for instance, of a mechanical irritation of a nerve, and the secondary alteration of certain nerve-centers. Still, the germ theory will best meet the mysteries surrounding the ætiology of the disease. We can well understand why injuries of feet and hands are so frequently followed by tetanus, when we learn that the specific bacillus has its *habitat* in the soil. Of course, other wounds are by the most different incidences also exposed to the same infection. Even the tetanus neonatorum need not make an exception. Scissors or the tying material may have been dropped on the ground or have contact with soil in some other way, and the cut surface of the umbilical cord be thus infected. I would not wonder if a thorough boiling of all these appliances would do away with the dreaded disease altogether.

Fortunately, there is one redeeming feature connected with the discovery of the bacillus and its ubiquity, and that is the fact that the human body is extremely resistant to its development. Otherwise, tetanus would be one of the most frequent terrors. But my intention is to relate the history of two cases in regard to their intimate connection, proving, as I think infection of the second from the first.

On January 7th a car-driver was brought into the John Sealy Hospital with a compound fracture of the leg. The soft parts as well as the bones were badly crushed, so that an amputation seemed advisable; the patient, though, would not consent to my proposition. Under appropriate treatment he did well enough, and in spite of delirium potatorum the case appeared hopeful. An extraordinarily quick pulse, however, contrasting greatly with the nearly normal temperature, kept me on the outlook for a coming storm. On the 22d slight trismus set in, and on the 24th the patient died from tetanus. It has to be added that he received his injuries by being thrown from his seat while driving a street car, and that the wheels passed over his leg. His clothes were so torn that, no doubt, the hind wheels had ample opportunity to deposit their dirt upon the wound.

On the 22d of the same month a negress was sent to the hospital suffering from cancer of the breast, the ward she was admitted to being in another building from the one in which was the former patient. She was operated upon on 23d, by removal of the breast and the axillary glands, with all their surrounding padding. The wound was stitched up, and a drain left only for the axilla. It is hardly necessary to state that the operation was done under aseptic precautions. Healing throughout by first intention followed, except in the track of the drainage-tube, and she would have left the hospital but for the money she waited for, to pay her voyage home. The drain, which had been clipped from time to time, was removed by the interne on the 3d of February, and its shallow and healthy-looking track was superficially dressed. All was virtually healed when to our surprise, on the 5th tetanus set in, to which patient succumbed on the 10th.

Thus we had two cases of tetanus within about twelve days.

There are two ways to explain this coincidence: Either it was mere accident that they happened so closely together, or it was infection of the second from the first case. Reports of a great number of contemporary cases of tetanus, and even real epidemics, are not uncommon, in private practice as well as in hospitals. Peculiar thermic and other hygienic conditions have been charged with such occurrences. And why should not this be so? The bacillus may under certain circumstances become more infectious, or the human system less resistant. If, for instance, right after a battle, when the wounded are lying on the ground unprotected, and the chance of the wounds becoming soiled with dirt and earth is readily seen, if many hundreds become tetanic, it takes little ingenuity to detect the common cause for all of the cases, if the findings of the bacteriologists be accepted as correct.

Still, under ordinary circumstances, where there is a probability of contamination of one case from another, I would rather accept the theory of direct infection. Our two cases occurred in different buildings, but the same interne had charge of both and had dressed them both with the very same instruments. The latter were not as thoroughly disinfected after each dressing as to make the pathogenic virus inoccuous, and without casting any blame on the much-worked dresser I nevertheless consider him the carrier of the deadly poison. The time of incubation (15 days) corresponds fully with the second infection.

Now, what is the practical outcome of such an experience? I think that, before all, such patients should be isolated at once, not only for therapeutical reasons, but also in order to keep dressings, instruments,—in short everything that comes in contact with them,—separated. The difficulty in hospitals may be great and the danger that infection of others may take place before the first symptoms appear is certainly the greatest. Fortunately, as already mentioned, the liability of infection by the bacillus of tetanus is very limited in man.

The problem nevertheless is, how to protect the inmate of a surgical ward against infection by dressing instruments. Putting them in the strongest disinfecting solution for a short time while going from one patient to another will hardly suffice.

Boiling, also, will be of too short duration. I see no other way but to have simple, cheap instruments designated to every bed, and to use them only on the one patient, when they could be disinfected at leisure. I should think the necessary expense would be richly rewarded in the long run.

Another point to which I would call attention is that the frequent dressing of wounds is not yet generally condemned as much as it should be. While the progressed surgeon keeps his hands away from a healthy wound as much as possible, in private practice we only too often see the busy man who dresses and redresses morning and night. Doing away with sponges, tubes, washes, etc., should be more and more taught. Gauze (cheese-cloth) well boiled, and then, as the case may be, or the surgeon may like, borated, iodoformed or without any addition, is all that is required for sponging, draining and dressing. It is cheap, easily obtained, aseptic, absorbent, etc. The less we meddle with wounds, the less chance for infection, especially in hospital work.—*Kan. City Med. Index.*

THE CONTAGIOUSNESS OF PULMONARY PHTHISIS.

The Paris Academy of Medicine recently held an earnest debate, in which some of its most distinguished members took part, on the subject of the contagiousness of pulmonary phthisis. The resolutions offered by Dr. Villemin were overruled, and resolutions less clear and defined adopted in their stead. In a remarkable study on the subject, published by Dr. Cimbali, of Rome, the following conclusions were reached:

1. Phthisis is a contagious disease, contact being the usual means of propagation.

2. The vehicles of contagion of phthisis are the milk of tuberculous cows and the sputum of phthisical persons, and infection may be communicated by the gastro-enteric or the respiratory mucous membrane.

3. The transmission of phthisis, as a specific disease, is rare, but the predisposition to contract it is frequent.

4. All persons exposed to the action of the germs of the phthisis are not liable, in consequence, to contract the disease. Those only who have a predisposition to it will be attacked by it.

5. The most favorable conditions for contracting phthisis are: Youth, a cachectic condition, constitutional or acquired debility, catarrhal affections of the respiratory organs, and the presence of phthisis in father and mother.

Prophylactic measures should have a double object:

1. To prevent the germs of phthisis from spreading freely and infecting healthy persons.

2. To increase the resistance of organisms predisposed to phthisis, and recommend the avoidance, as far as possible, of association with persons affected with tuberculosis.

Phthisis being usually a chronic affection and very general in some countries, the majority of persons affected by it being able to go about their usual avocations, often for a long period, without suspecting their condition, the progress of the disease, which is often mistaken for a simple bronchial catarrh, being very insidious, it is difficult, while fully recognizing the contagious character of the disease, to insist upon the isolation of phthisical persons. Society would not permit the isolation of from one-quarter to one-seventh of its members, nor would science venture to advise so stringent a measure, which, beside being an attempt against individual liberty, would be of difficult execution. Isolation is practicable only in hospitals.

Disinfection or destruction of the medium containing the germs of phthisis and constituting the vehicle of contagion is strongly recommended. Every phthisical person should expectorate into a cuspidor. This cuspidor should contain water or a disinfecting liquid, and should be furnished with a cover. The sputum should be destroyed by heat, and the vessel cleansed with boiling water. There are other preventive measures which are important, but of difficult execution. These are:—

The disinfection of all articles that have belonged to a phthisical person before they are used by a healthy person. Houses in which phthisical subjects have lived should be rigorously disinfected before occupation by healthy persons. Milk from cows known to be tuberculous should not be used as food before being boiled. If these means were employed,

the agents of phthisis would be less widely disseminated and the disease would consequently be less frequent.

All persons predisposed to phthisis should as far as possible avoid places in which the disease may be contracted (colleges, barracks, workshops, etc.) The children of phthisical persons should not live in the house with their parents.

As most persons predisposed to phthisis offer feeble resistance, and a vigorous, robust organism is a soil little adapted to the growth of the bacilli of phthisis, all possible precautions should be recommended, and hygienic and therapeutic rules, the object of which is the improvement of nutrition and the building up of physical strength, should be carefully indicated.

Phthisical subjects, if young and descended from phthisical parents, should have occupations which permit them to pass the greater part of the day in open air. A simple and regular life, plain and substantial food, a country life, hydrotherapy, gymnastic exercises, excursions in the mountains, etc., are to be recommended for building up the strength of consumptives. It is indisputable that if the measures, general and individual, recommended as preventive of the disease were adopted, the number of persons attacked by phthisis would be greatly diminished. Unfortunately phthisical persons live the ordinary life and disseminate the germs contained in their sputum. Physicians should strongly recommend the prophylactic measures suggested by science and experience, and insist upon the dangers of their non-observance.—*College and Clinical Record.*

DIABETES.*

The question of diabetes, so mysterious to this day, seems to be entering upon a new phase. Physiologists and clinicians multiply their experiences and the medical press registers every day precious results. These materials, elaborated without preconceived intent, corroborate and complete each other, and it does not seem too rash to state that diseases and

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affections of the pancreas are possibly the exclusive causes of glycosuria.

M. Lancereaux was the first to establish clearly the relation between alteration of the pancreas and that form of diabetes in which the individual loses his weight and becomes emaciated.

Minkowski and von Mering induced this form of diabetes in the dog by removing the pancreas; they succeeded also at times in producing slight diabetes when they left some portions of the pancreas and the operation was successful. In this case, the diabetes was the consequence of the operation, but it was held in check by the withdrawal of amylaceous foods. M. Lepine, of the school at Lyons, repeated these experiments and investigated the therapeutic means for diminishing the excretion of sugar in the dog deprived of the pancreas; he succeeded in this by injecting into his veins the chyle from an animal previously fed, or vegetable diastase; he obtained the same result in a diabetic patient to whom he administered pancreatin, but he was not able to continue his experience.

Baumel, of Monpellier, in 1881, announced that alteration of the pancreas is more constant in the plethoric than in the emaciated type of diabetes; in the former the alteration of the pancreas is visible to the naked eye; in the latter it is microscopical; he had the opportunity to demonstrate this latter alteration in four subjects by autopsy, and has published his observations in a memoir entitled "Diabetes and the Pancreas."

According to Baumel, the macroscopical and microscopical alterations of the pancreas produce the same results, they suppress or diminish the reabsorption of the pancreatic juice; they induce the absence of the pancreatic diastatic ferment in the digestive tract and perhaps in the liver; these affections bring about an incomplete transformation of amylaceous substances and produce an excess of glucose in the organism. Baumel thinks with Lepine that the treatment to be established in diabetes should comprise the preparations of pancreatin.

The experiences of Defresne confirm the hypothesis of

Baumel; they cause one to think that diabetes is established when the pancreatic juice is not poured out into the intestine in sufficient quantity or quality, the blood does not carry to the liver the pancreatic ferments destined to organize the ferment of that organ.

According to Defresne, under the influence of pancreatin in excess one-third of rabbits die, one-fifth become glycosuric and all become hyperglycemic; on the other hand, glycogen was in large part absent from the liver.

His experience is instructive; it shows that pancreatin preserves its diastatic properties after its sojourn in the stomach, and that one can count on it in the treatment of diabetes. On my own account I have seen paecreatin influence the excretion of sugar in the two following cases of diabetes.

I employed it for the first time in a gouty subject, overloaded with fat, who excreted eighty grammes of sugar a day. I attributed the attack of gout to the incomplete elaboration of food, as the result of a too sedentary life. With the design of modifying the products of nutrition, I prescribed for him five pills of pancreatin, four times a day, three hours after meals. The attack of gout ceased, and, what I did not in the least expect at that time, the sugar disappeared completely from his urine.

One of my friends, M. X. ——, an architect, was the object of my second observation. He was of good constitution and moderately fleshy; however for many years he had felt the need of aiding a feeble digestion by taking alkaline tablets two hours after meals. When about fifty-five he complained of dryness of the throat and of frequent urination; he passed 200 grammes of sugar in twenty-four hours, his appetite was good, but his digestion remained poor; with the idea of assisting it, I prescribed for him five pills of pancreatin, four times a day, to be taken three hours after meals, and I advised him to dispense with hydro-carbonaceous foods as far as possible. His digestion improved, the diabetes diminished and the excretion of sugar remained between 80 and 120 grammes a day. The regime was carefully observed during the six years following. Then the sugar in his urine increased very much, jaundice appeared, he grew weak and very much emaciated.

I sustained my patient for some time on peptone, but the cancer of the pancreas continued its work of destruction and he succumbed.

I think that in the latter case the pancreatin retarded the progress of the emaciating diabetes, and I think that larger doses would have prolonged the struggle; however, I intend to renew these observations and to carry the dose of pancreatin up to four to eight grammes a day, if necessary.—*Prog.*

DEPARTMENT OF

GENERAL SURGERY.

EDITED BY

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TUBERCULAR MENINGITIS—FOLLOWING TUBERCULOUS OSTEITIS—REPORT OF CASES.

M. DE PASS, M. D.

House Surgeon Hospital for Ruptured and Crippled, New York.

During the year I served as a member of the House Staff of the Hospital for Ruptured and Crippled, of New York, we had a number of deaths from Tubercular Meningitis, following a Tubercular Osteitis. The following is a report of the most interesting and well-marked cases:

Case I. Fannie T., age four years, in August, '88, complained of left shoe hurting, later on ankle began to swell; walked lame. For last three weeks unable to walk. Brought to the out-door department of this hospital, where diagnosis of osteitis of right ankle was made. Admission for operation advised.

October 15, 1888. Admitted to hospital. Condition then was: Left ankle-joint very much enlarged; fluctuation; painful to touch; no motion; unable to put foot to floor.

October 19. Etherized and joint scraped.

November 28. Sinuses still discharging.

December 16. Complains of headache; no appetite.

December 18. Very restless; complains of severe headache and thirst.

December 19. Vomited after eating; very little appetite; headache.

December 20. Last night very restless and thirsty; slept but little; severe frontal headache; three movements. This morning very stupid; abdomen retracted; pulse and respiration irregular; pupils somewhat dilated and no response to light; neck stiff.

From 4 to 9 P.M. had convulsions, with very short intervals between. At 10 P.M., unconscious and very weak; pulse weak and intermittent; respiration rapid and irregular; head drawn well back on spine; abdomen markedly retracted; pupils dilated and no response; constant rolling of eye-balls.

December 21. Some better this morning after a quiet night; can be aroused sufficiently to take small amount of nourishment.

December 27. During last few days condition has been fair; taking nourishment regularly; very little stiff neck, vomiting, retracted abdomen, or headache; pupils slightly respond to light; perfectly conscious; constipated. Four P.M., has had four convulsions. Now has complete paralysis of right side and almost constant involuntary movements of left arm and head; opisthotonos; pupils contracted and no response; pulse and respiration irregular.

Eyes examined by Dr. David Webster, who finds: Optic neuritis, with almost complete obliteration of optic disc from effusion.

December 28. Had a number of convulsions last night.

At 5 A.M. pulse, 150, intermittent; respiration, 31, irregular; temperature, 104.1°.

At 7 A.M. died from exhaustion.

Case II. E. T., twenty-six years, admitted to hospital April 3, 1890. Had osteitis of left hip and caries of the last two dorsal and first lumbar vertebræ; abscess in lumbar region to left of spine, and one on outer aspect of upper part of thigh.

Plaster of Paris jacket and spica applied; put to bed with weight and pulley. Abscesses aspirated several times.

May 2. Slight headache and sick stomach.

May 4. Headache, vomiting, restless.

May 6. Headache in occipital region very severe; frequent vomiting; pain in eyes when exposed to light; right pupil dilated more than left; both respond.

May 7. Pain in head and eyes very severe; no vomiting; pulse and respiration rapid, but regular; Tache cerebrale; both pupils equally dilated, very slight response.

May 8. Last night slept but little from severe headache. This morning more comfortable, but rather stupid; peculiar stare; complains of sensation of numbness of right side, particularly in tongue; pulse and respiration rapid and irregular; restless movement of head from side to side; continual picking at bedclothes. At 7 P.M. almost unconscious.

May 9. Spent fairly good night; restless at times. Pulse, irregular; respiration rapid, but regular; vomiting; less pain in head; perfectly conscious; pupils respond well.

May 14. For the last few days doing fairly well; eating regularly; very little headache, sick stomach, or pain in eyes. Last night was very restless; severe frontal headache. This morning headache very severe; frequent vomiting; pupils widely dilated; slight response; abdomen somewhat retracted; pulse and respiration rapid and irregular; neck stiff.

May 15. Very restless; pupils widely dilated, right more than left; no response; neck rigid; marked opisthotonos; pulse and respiration very irregular.

May 16. Unconscious; pulse weak, rapid and intermittent.

May 17. Up to last night has been constipated. Several movements last night, streaked with blood; pulse weak and intermittent.

May 18. Several hemorrhages from bowels.

May 19. At 3 A.M. Profuse hemorrhages; died from exhaustion at 4 A.M.

Case III. Carrie P., four and one-half years, December, 1888, began to limp; pain in right hip; "night cry." Brought to out-door department of this hospital where diagnosis of osteitis of right hip was made. Gibney's modification of Taylor's brace applied. Large abscesses formed on outer aspect of right thigh, upper fourth.

December 5, 1889, admitted to hospital. Condition then was: Right limb rotated outward; one inch shorter than left; adducted; large abscess on upper part of thigh, outer aspect; all movements at hip limited and somewhat painful.

December 10. Abscess opened.

December 30. Abscess on anterior aspect thigh; few days later opened spontaneously.

March 5, 1890. Thomas brace applied; three open sinuses.

June 21. Sinuses closed; no pain about hip; general condition good.

June 2. Vomiting last few days.

July 3. Drowsy most of day; projectile vomiting several times; frontal headache; light painful to eyes; pupils dilated, but respond to light; tongue slightly coated, dry; neck somewhat stiff; pain on bending head forward. Eyes examined by Dr. David Webster, fundus found normal.

July 4. Vomited twice; severe frontal headache; abdomen slightly retracted; drowsy; pulse slow and irregular. At 11:45 P.M. called by night nurse, who reports that child is unable to talk or swallow. When seen was in a violent spasm of right side, more marked in face; after which pulse 82, very intermittent; respiration slow and irregular; pupils contracted, no response. At 11:30 P.M. pulse, 116, irregular; respiration, 18, regular.

July 5. Up to 1 A.M. last night, very restless; one or two light convulsions. From 1 to 5 A.M. quiet.

At 5 A.M. pulse, 120, irregular; respiration, 16, regular; neck rigid; head drawn well back against spine; pupils dilated, no response; abdomen retracted; Tache cerebrale well marked; during the day could be aroused; vomited twice; restless at times. Morning temperature, 99.6°; evening temperature, 98.2°.

July 6. Condition somewhat improved since yesterday; takes nourishment regularly. Morning temperature, 99.4°; pulse, 69; respiration, 16. Evening temperature, 100.8°; pulse, 90; respiration, 24.

July 7. Up to 5 P.M. condition about the same as yesterday; vomited twice. At 5 P.M. had convulsions; temperature, 103.8°.

July 8. Last night had a number of convulsions, with very short intervals between. At 9 A.M. died from exhaustion. Just before death temperature, 106; pulse, 176; respiration 48. Constipation during entire attack.

Case IV. Antony M., ten years, during the spring of 1888 had pain in right hip and knee; limped; "night cry."

May 26, 1890, admitted to hospital, where diagnosis of osteitis of right hip was made.

His condition was: Right thigh and leg acutely flexed; thigh considerably adducted; infiltration, but no abscess; no motion in hip, the slightest attempt causing severe pain.

June 15. Under ether; deformity corrected and plaster of Paris spica applied.

July 4. Abscess in right gluteal region; aspirated.

July 10. Under ether; abscess opened by long, transverse incision.

July 30. Headache in frontal region; vomiting; tongue coated and dry; skin dry.

July 31. Severe frontal headache; vomiting; pupils dilated, but responded; light painful to eyes; neck stiff and painful on bending forward; nervous twitching of fingers; peculiar stare; abdomen slightly retracted; stupid; screams in sleep frequently; pulse and respiration irregular.

August 1. Had good night; brighter this morning; pupils dilated; slight response; abdomen more retracted; vomiting; pulse and respiration irregular. At 5 P.M. very restless, screaming several times. At 7 P.M. unconscious; abdomen markedly retracted; Cheyne Stokes respiration and Tache cerebrale well marked; temperature, 104.2°; pulse, 152, intermittent.

August 2. Had very bad night; frequent vomiting and screaming. This morning some better; temperature, 103°; pulse, 135, irregular; respiration 26, irregular; pupils widely dilated; no response; abdomen markedly retracted.

August 3. Failing; skin damp and cold; typical "Boat Belly" and Cheyne Stokes respiration; neck rigid, with head drawn back against spine; temperature, 104.1°; pulse 161, intermittent; respiration, 40.

August 4. At 6 A.M. commenced having convulsions, which lasted till 7:30 A.M., when patient died from exhaustion.

Just before death abdomen very much distended, pupils contracted, marked opisthotonos; pulse, 175, intermittent; temperature, 106.4°. Constipated during entire attack.

Case V. Agnes D., three and one-half years, during December, 1889, complained of pain in right hip; walked lame; had "night cry." Was brought to out-door department of this hospital, where diagnosis of osteitis of right hip was made, and Gibney's modification of Taylor's brace applied.

Did well up to July, 1890, when she complained of pain in left hip. Brought to hospital where diagnosis of osteitis of left hip was made. Admission advised.

July 24, 1890, admitted to hospital. Condition then was: Both thighs rotated outward; all motions at hips limited and painful; considerable infiltration, but no sign of abscess.

Double plaster of Paris spica, reaching from axilla to lower part of calf, applied. Patient put to bed.

August 3. Vomited once or twice.

August 4 and 5. Projectile vomiting several times; sleeps all the time; very difficult to arouse.

August 6. Can retain nothing on stomach; when aroused is very irritable and protects eyes with hands as if light were painful. Pulse and respiration slightly irregular. Screams several times in sleep.

August 7. Last night very restless, screaming several times. Abdomen slightly retracted; pupils dilated, with very little response to light; pulse and respiration rapid and irregular; neck somewhat stiff; pain on bending head forward on chest. Morning temperature, 100.4°; evening temperature, 102.2°.

August 9. Abdomen markedly retracted; pupils widely dilated, no response; neck rigid; pulse and respiration very rapid and irregular; Tache cerebrale well marked; unconscious; morning temperature, 103.°; evening temperature, 103.4°.

August 10. At 10:30 P.M. had convulsion, after which was very weak; pulse intermittent. Several light convulsions

during the night. Morning temperature, 102.4°; evening temperature, 103.6°.

August 11. From 6 A.M. to 8 P.M. could be aroused sufficiently to take nourishment.

August 12. Had number of convulsions during the night. Pulse rapid and intermittent; typical Cheyne Stokes respiration; has been growing weaker all day; number of light convulsions; typical "Boat Belly;" died from exhaustion at 9:40 P.M.

At 8 P.M. temperature 107°. Constipated during the entire attack.

PISTOL SHOT WOUND—OPERATION—RECOVERY.

T. N. MERIWETHER, M.D.

Dick Johnston, a negro man, æt. 27, laborer, of robust constitution, became involved in a difficulty with a rival in love. He was trying to run away when shot. My brother, Dr. J. C. Meriwether, and myself were summoned to see him at 12 o'clock at night, and found him in a semi-comatose condition, with strong, bounding pulse, body cool and pupils greatly contracted. There was complete muscular relaxation. He had been shot with a 32-calibre S. & W. pistol.

Upon examination the ball was found to have entered the left temporal bone, just behind the ear.

The wound had been inflicted several hours before and patient had lain on damp ground till half an hour previous to our arrival. He had vomited profusely and was, as the negroes—our informants—told us, completely insensible the whole time he was lying on the ground. Both the subjective and objective symptoms pointed to a clear case of concussion, and as small particulars of brain substance were found on the external wound, the case seemed hopeless. We searched in vain for the bullet, but could not find it. A medium size, blunt-pointed steel probe passed readily through both tables of skull and the brain could distinctly be heard pulsating against the instrument. We decided the bullet must be in the brain and we could only alleviate his sufferings (which now seemed intense). Chloroform was administered by myself, under the influence of which patient became very ob-

streperous, it requiring three or four strong men to hold him. After he was completely anesthetized an incision was made, extending half an inch on either side the wound, and it thoroughly washed with carbolized water; the spiculæ of bone carefully removed, of which there were a great many. The incised portion was then partially closed with two stitches, after being dusted with iodoform, and a drainage tube inserted. A capitellum bandage was then applied and the patient expressed himself as feeling "mighty good."

We administered a free cathartic, consisting of ten grs. hydrarg. submur., and also the following, to correct any tendency to restlessness: Bromide potass, gr. xv; spirits nitre dul., ℥i. Directions were given to repeat this if necessary.

We were surprised on calling the following day to find symptoms somewhat improved. Thermometer, placed in mouth, registered 102°; pulse strong and respiration 20. Bowels constipated. A full dose of Epsom salts was given to correct this. Kidneys were acting normally, though urine was rather highly colored.

Among the unfavorable symptoms, there existed marked photophobia; patient complained of pain over the cervical region, sometimes dull, and at others sharp and lancinating in character. There was a constant desire with him to micturate and complete anorexia. Fearing meningitis was setting up, cold cloths were put to his head and back of neck and large doses of quinine were frequently given. The bromide potash and nitre were continued and they seemed to have a happy effect. Opiates were strictly avoided, on account of their stimulating effect upon the brain. (I forgot to state wound was dressed as the day before, with the exception that the carbolized water was substituted by a 1-1000 bichloride solution.)

The third day pain in back of neck had increased and patient informed us he felt a bump just under the ear. We discovered something hard on examination and determined to remove whatever it was, which we did, and it proved to be the ball, which by some strange cause, after spending its force in penetrating the skull, had glanced out and embedded itself

between the soft tissues and bone, where it was found. The new wound was now drawn together with a single stitch and treated as other was.

The fourth day symptoms all improved, except atonic condition of bowels. To correct this pills containing the following were given: Calomel, gr. i; podophyllum, gr. ½; sig.: One pill three times daily. Patient discharged.

A few days afterward wife of patient sent for me in haste, saying her husband was dying. I found him weak, pulse feeble, tongue highly coated, temperature 103°, bowels constipated, pupils slightly contracted. He seemed highly nervous and complained of pain in frontal region. I administered a full dose of antipyrin and ʒi dose of bromide, with a calomel purge, and left him resting nicely. He is as well now as anybody, and works in the field, no matter how warm it may be.

Now, how did he escape so miraculously? A Presbyterian doctor would say "his time to die hadn't come," and I am inclined to indorse this opinion.

THE ANNALS OF SURGERY, devoted exclusively to surgical science and practice, should find its place on the table of every surgeon. The August and September numbers contain excellent papers by some of the best men in America, besides clippings and translations from the best European journals.

ONE of Reed & Carnrick's extensive factories at Goshen, N. Y., was destroyed by fire on the 10th inst. This factory was devoted wholly to the production of their Soluble Food and Lacto-Preparata and contained extensive and valuable machinery. They had considerable stock of these Foods at their New York offices, and consequently there will be no delay in filling orders. The factory will be at once rebuilt three three times the size of the one burned, with machinery correspondingly enlarged.

DEPARTMENT OF

GYNECOLOGY.

EDITED BY

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To whom all matter pertaining to this Department should be addressed.

TREATMENT OF ATONIC POST-PARTUM HEMORRHAGE.*

SIMON L. ELSNER, ROCHESTER, N. Y.

It is long since our journals have given us anything new or original in regard to the management of this most dreadful calamity. I use the term "atonic" to exclude the other forms of hemorrhage, such as arise from accidental lacerations and ruptures, and those known as secondary, caused by adherent placenta. The causes of atonicity of the uterine fibre are many. I shall speak of those only which have reference to the treatment that I shall describe.

1. Those cases where feeble contraction, beginning with the very first stage of labor, may only be the herald of inefficient uterine action in the third stage and after its completion.

2. Those in which the first and second stages are accompanied by violent contractions—*i.e.*, protracted labors, tiring the women as well as each uterine fibre.

3. Those due to over-distention of the uterine cavity by twin pregnancy, hydramion, etc.

4. A very slow third stage.

5. Those due to rapid delivery, either spontaneous or by forceps.

6. Hastening Crede's method, causing partial detachment of the placenta and giving the uterus no rest to contract during the third stage.

7. Chloroform and alcoholic stimulants during labor.

8. Last, but most important, cases run down by bad hygiene, and cases of frequent labor, causing a predisposition to the bleeding diathesis.

* Read before the Central Medical Association, New York.

With the symptomalogy we all are well acquainted, so we will pass on to the treatment. Nature tries to take care of these cases, closing each vessel by the contraction of the uterine fibres and by forming clots in the open mouths of the sinuses. We should, as much as possible, try aid to her, not to work independently of her precautionary measures. First of all, the physician must be calm and prompt, and should act most intelligently. He must have confidence in himself and his measures, in order to gain the confidence of his bystanders, thus securing their very best services. The patient should at once be put in a recumbent position across the bed, and the limbs ligated. Compress the fundus against the hand introduced into the uterine cavity. If this fail, try Zweifel's method by putting one hand behind the fundus on the abdomen, the other hand into the cul-de-sac, drawing the cervix forward.

Before proceeding I shall first tabulate the usual routine of procedures:

1. The two *natural means* of which I spoke, viz.:
   a. Contraction. *b.* Coagulation.
2. *Artificial means.*
   (1) *Compression*—This comprising
      a. Manual compression. *b.* Compression by foreign body in utero.
   (2) *Styptics.*
      a. Heat. *b.* Cold. *c.* Electricity. *d.* Styptic drugs.

One loses too much time preparing hot and cold injections for irrigation; there may be no ice at hand; your battery is at the office and so out of reach. Styptics not only have these objections, but they are dangerous and always produce more or less sloughing.

I am quite satisfied that, if compression fails to stop the flowing, there is nothing as handy, certain, and practically without danger as tamponing the entire uterine cavity and vagina with aseptic gauze, and preferably that containing about ten per cent. of iodoform. This method truly and certainly assists nature, for it helps to coagulate the blood, and if not bringing on contractions, answers the same purpose. You can always have a few yards in your bag, and, inasmuch

as your hand is already in the uterine cavity to make compression, you can pass up your gauze in one or two long strips with your placenta forceps. You will find that you at once control the bleeding; you have an aseptic canal filled to the vulva with an antiseptic material. I have had occasion to use this method twice during the past three weeks, and with a most gratifying result in each case.

After washing the external genitals with soap and a solution of bichloride, 1:1000, irrigate the *vagina* with the same strength solution. See that the bladder is empty. Grasp the cervix with a forceps or with the fingers, draw it well down to the vulva, then pass in your gauze in one long or two shorter strips. The amount of gauze required is surprisingly small.

Advantages.—1. It undoubtedly brings on contraction in the most atonic uterus; if not, what form of compression is so handy and certain? If you use your hand in the uterine cavity, there is no limit to the time it must remain there. You cannot leave your patient with safety even after the bleeding is controlled.

No man has the lasting strength to keep his hand in the uterine cavity without at times letting up on his grip. Then the patient is not at all comfortable with your hand in her genital tract. If you tampon, you can leave your patient and feel safe until your next visit.

2. It does stop the bleeding at once, whereas with the other methods you experiment with the one styptic that will do it slowly.

3. Again, this method is as safe in the hands of the beginner as in those of the most skillful surgeon. If the young man mistake his case of lacerated cervix for one of post-partum hemorrhage, is it not better that he tampon and stop the bleeding, and then find his error, rather than do it on the post-mortem table?

As regards carrying infection into the uterus with the gauze, or picking it up in the vagina, I can say but this: that in the hands of the thoroughly aseptic man there is no danger. His gauze is kept in a can and taken from there directly into the uterus. With the man who is reckless it is less dangerous than his badly disinfected hand put into the uterine cav-

ity. As for contaminating the gauze as it passes through the vagina, that objection is *nil*. There is very little infection present after the bichloride douching, and what few germs may enter are killed by the carefully prepared gauze.

It is unnecessary to use anesthesia for this procedure, since it is nearly painless and takes but a few moments.

To conclude: 1. We have the tampon, in the hands of the careful practitioner a certain measure and without danger.

2. We have, in packing the vagina, a means at the same time to stop the bleeding from a badly torn cervix.

3. We have this method calling for much less care in diagnosticating the exact state of affairs.

4. You can leave your patient with safety and remove the gauze in twenty to twenty-four hours. At the end of this time your patient has had a good sleep and the uterine fibres are well able to take further charge of the case.

At the meeting of the Tenth International Medical Congress, recently held in Berlin, Mr. Lawson Tait, after Sanger —who departs from the German idea—had read a paper advocating drainage after laparatomy, said:

What Dr. Sanger has expressed only increases my doubts as to the correctness of the modern doctrine of antisepsis, which in Germany is accorded almost religious veneration. I am an apostate; I do not believe in antisepsis. I am convinced that this view does much harm. All the culture experiments are made on dead culture materials which do not corespond to the conditions of living tissue. Germs of decomposition can be kept off in many different ways; for instance, fruit can be so prepared with sugar that it resists decomposition. Blood also belongs to the tissues. As early as 1872 Campbell advised me to use drainage. I did not take his advice; it appeared to me horrible to put such a tube into the abdominal cavity. Finally I used it after all, and with excellent results. There are three indications: 1. As an advance protection in an operation in which hemorrhage may occur. Many deaths ensue because we do not know that hemorrhage has taken place. This tube very quickly shows the hemorrhage. It is one of the best hemostatic means. Moreover, a hemostatic can be injected, as I have often done. The entire contents of a rectum passed through one of these tubes three weeks after an operation. 2. For the bladder. 3. For

the rectum. As soon as the peritoneum is dry the tube is removed. Furthermore, drainage tubes must be employed in exhausted patients, also in all laparatomies on persons over 60 years of age. The tubes are quite small and are furnished in two sizes. The use of these tubes constitutes a great advance in abdominal surgery.

DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

EDITED BY

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Memphis, Tenn.

To whom all matter pertaining to this Depa tment should be addressed.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

CONCUSSIONS OF THE EYEBALL GIVING RISE TO ACUTE LOCAL SYMPTOMS OF CONGENITAL SYPHILIS.—Dr. Adolf Bronner (Bradford) recorded three cases in which concussion of the eyeball in patients with congenital syphilis had given rise to interstitial keratitis and peripheral choroiditis. 1. A girl aged 14 was hit on the left eye with a shuttle at the mill. Interstitial keratitis set in, and seven months afterward the cornea of the right eye became similarly affected. 2. A man aged 22 was struck on the left eye with a piece of coal. The cornea was steamy the next day, and typical syphilitic interstitial keratitis set in, and in ten days the right cornea was also affected. In this case there were brown-black patches of choroidal pigment in the periphery of the fundus. 3. A boy aged 9 was struck on the left eye with a dart. Three weeks afterward he noticed that he could not see so well with that eye. The cornea and media were clear, but there was a patch of choroidal absorption near the macula and peripheral choroiditis. Dr. Bronner said that, from a legal and also therapeutic point of view, it was important to know if concussion of the eyeball could cause a local outbreak of latent congenital syphilis. He thonght that this did occur frequently, but was overlooked.—*Oph. Rev.*

"CEPHALIC TETANUS" FOLLOWING A PENETRATING WOUND OF THE ORBIT.—Dr. Rockliffe (Hull) recorded this case. A boy aged 7 received a slight penetrating wound of the left orbit from a fall. Two small pieces of thorn suppurated out on the seventh day. On the tenth day he complained of stiffness of the left face and neck, which was followed by spasmodic contractions of the left side of the face, complete right, partial left ptosis, with flattening of the left side of the face, and inability to open his mouth. The wound and orbit were explored and thoroughly washed out with perchloride of mercury solution; the spasms which disappeared under chloroform, continued to increase, and became more general, even to opisthotonos, until the twelfth day, when they began to decrease, and entirely ceased in three weeks. The facial paralysis, ptosis, and inability to open the mouth remained for some weeks afterward. Twelve weeks after the accident the only symptoms were slight drooping of the left lid and diplopia on convergence, both of which were decreasing. *Oph. Rev.*

ACUTE CELLULITIS OF THE ORBIT WITH A FATAL RESULT.—Mr. Simeon Snell (Sheffield) recorded this case, occurring in a girl of 14, and following a swelled face due to carious teeth. Two teeth had been removed from the upper jaw on the corresponding side, and subsequently, while the face was still swollen, the patient had been for a drive on a cold day in an open trap. When seen a fortnight later there was great swelling of the lids on the right side, with proptosis and œdema of the conjunctiva. There was apparently no affection of sight, but ophthalmoscopic examination was not possible beyond that which sufficed for the observation that the media were clear. There had been pain in the orbit, with headache and vomiting. Three days later a considerable quantity of pus was let out by an incision through the inner third of the lower lid. This afforded great relief, and the eyeball resumed its normal position. Two days later, however, the patient was much worse; there was great pain extending to the occiput, with vomiting and retraction of the head. She became comatose and died the following day. There were no con-

vulsions, but the pain in the head was complained of as long as she remained conscious. The condition of the orbit appeared quite satisfactory, and the drainage tube had been removed. A *post-mortem* examination was not allowed. It was ascertained that at the extraction of two teeth from the upper jaw there was a discharge of very fœtid pus, and the bone immediately around the roots was necrosed, the gum being inflamed and turgid. The teeth were badly decayed, the dentine being thoroughly softened. There could be no doubt that in this case the condition resulting from the carious teeth was the immediate cause of the necrosis and orbital cellulitis. Mr. Snell referred to somewhat analogous cases which he had seen, one published in the *Ophthalmic Review*, 1882, the second in the current number of that journal. *Oph. Rev.*

TREPANATION OF THE CRANIAL CAVITY IN SUPPURATIONS OF THE CRANIAL CAVITY TAKING THEIR ORIGIN FROM SUPPURATIONS OF THE MIDDLE EAR.*—At a meeting of the Imperial Royal Society of Physicians, of Vienna, Prof. Salzer, jr., read an important paper on this subject, and showed a patient, aged eleven years, who had been successfully operated by him. The girl suffered for many years from otorrhœa, and in February of this year the "évidement" was practiced, but severe symptoms, such as vomiting, fever, weariness, and spasms of the right part of the body, came on; a fetid discharge from the left ear was constantly observed. Taking into account these threatening symptoms, trepanation of the mastoid process was performed at Prof. Billroth's clinic. A necrotic piece of the dura mater was found immediately after opening; this was removed. An exploratory puncture of the part of the cerebrum lying under the necrotic dura mater did not reveal the presence of pus. A very fetid pus, however, escaped from the "sinus sigmoideus" immediately after opening. After a large part of the sinus had been extirpated and the wound had been openly treated, the course of the wound was not attended with any reaction. Some days after operation, the patient had the sensation as if she would fall from the bed at the left side, and a staggering gait to the left side was also present, which symptoms might, perhaps, be due from a lesion of the semi-circular canals.

* Vienna Letter, N. O. Med. and Surg. Jour., August, 1890.

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Original articles and clinical reports solicited. Contributors are notified that all matter forwarded us, is received with the distinct understanding that said matter has never appeared in print, and will not be allowed to appear in any other journal prior to its publication in this. All such matter should be sent directly to the editor to whose department it pertains.

Secretaries of medical and surgical societies will favor us by sending dates of regular meetings, with brief programme of important subjects coming before the meeting.

All matter must be in our hands on the tenth of the month preceding its publication.

The JOURNAL will be issued on the fifth of each month.

All communications other than provided for above, should be addressed to

JAS. L. MINOR, M.D., Editor,
Memphis, Tenn.

WM. KRAUSS, M D., Business Manager.

CORONERS' INQUESTS.—Better commentary upon the present faulty method of holding coroners' inquests cannot be offered than that which was furnished by the Persons case. The body of a dead woman was found; the friends of the deceased attributed the death to suicide; a coroner impanneled a jury and a verdict in keeping with that opinion was rendered. A pistol near the body, with two empty chambers, was considered the instrument of death. The body was buried, but the instincts of a newspaper reporter prompted Mr. Underwood, of the *Appeal*, to investigate further, and as a result of this the authorities decided to disinter the body and have an examination by a physician. The physician found that the wounds were not caused by a pistol shot; that the deceased could not have inflicted them herself, and that the case was one of murder. In this case the evidence of violence at the hands of another were so marked that it is difficult to understand how an intelligent jury could render a verdict of suicide. Yet they made the mistake, and it was by the merest accident that their error was discovered. But any system which allows such errors is radically at fault. The present coroner need have not an atom of medical knowledge, and yet we are constantly reading of their decisions as to the cause of death. It happens that they are called upon to decide the

cause of death in just those cases which might be caused by foul play, such as require the most thorough knowledge of medicine to determine. No one but a physician should be allowed to hold inquests. The pay now received by politicians would amply suffice for the services of a competent physician, and the community would then be assured that such grievous errors would not occur. Will not our lawmakers take the matter in hand and give us this much needed reform?

PATHOLOGY AND TREATMENT OF TETANUS.—In an editorial, the *New Orleans Medical and Surgical Journal* (Sept.) refers to the progress recently made in the pathology of tetanus, and, after citing the fact that various experimenters have clearly shown the disease to be dependent upon a definite bacillus (*bacillus tetani*), says:

"The two immensely practical points which Kitt enables us to infer are: First, the bacillus of tetanus does not wander listlessly over the whole human body, but remains confined to a very small area around its point of entrance, and from this focus it does all its mischief. Second, the convulsive symptoms are due to the ptomaines elaborated by the bacilli. The convulsions can be produced at will by injecting solutions of these ptomaines into healthy animals, unaccompanied by bacilli.

A dead bacillus is incapable of doing any harm. If, then, the germs remain confined to a small space around the point of entry, why not attack the intruder and destroy him?"

This Pavlini has done empirically by injecting carbolized water hyperdermatically around the original wound. And Drs. Loeber and Joachim, of New Orleans, treated "a young man about 20 years old who acquired tetanus from an injury of the foot, due to stepping on a rusty nail. When the tetanus developed the wound had already healed. The general treatment employed was the administration of the usual anti-spasmodics, while the local treatment consisted in reopening the wound and applying strong carbolized solutions, and the repeated application of Venice turpentine.

"It was noticed that the tissues underneath the scar were discolored, of a dirty sero-purulent appearance. This patient recovered."

A CURE FOR CONSUMPTION.—Dr. Robert Koch, the discoverer of the tubercle bacillus, claims to have found an agent which will check tuberculosis.

The Tri-State Medical Association of Mississippi, Arkansas and Tennessee will meet in Memphis Nov. 19th and 20th.

These meetings are always well attended by physicians in Memphis and its contiguous country, who come together for the purpose of obtaining, comparing and presenting information on medical topics. While individual members of the society have done excellent work, the association as a whole has not accomplished those results which might be expected of it. Memphis is in the center of the great Mississippi Valley, which has many diseases and conditions peculiar to itself which need elucidation, and this can be done only by organized effort on the part, not only of the individual members, but of the society as a whole. Committees should be appointed for the various departments of medicine, whose business it shall be to collect information and present systematic reports of progress in these several departments. A change in the by-laws will be necessary before this can be done, but that should be accomplished. We are informed by the secretary that indications point to a full attendance and a number of interesting articles.

The Pathology of Diphtheria.—Klein, in his experiments with the Klebs-Loeffler, or diphtheria bacillus, has demonstrated some very interesting and important facts concerning the pathology of diphtheria and the behavior of disease germs. He shows that inoculation of fresh diphtheritic matter from the human subject or cultures of diphtheria bacillus, will produce diphtheritic disease in the lower animals—the guinea pig, the cat and the cow. Furthermore, that these animals are subject to this disease under such circumstances as to prove that it is caused by, or is itself the cause of, diphtheria in the human being. And finally, that the diphtheritic membrane alone is the seat of the multiplication of the diphtheria bacillus, and that here a chemical poison is elaborated, which when absorbed into the system, produces the constitutional symptoms of the disease.

We take pleasure in calling attention to the card of the Woodruff & Oliver Co. This house furnishes only the best in physicians' phaetons, harness, road wagons, etc.

THE CHOLERA.—Asiatic cholera now prevails over a pretty large area of the earth's surface, and seems to be increasing steadily both in intensity and extent. It is reported from Spain, Portugal, Egypt, Turkey, Arabia, Southern Russia, Japan and Batavia.

THE Southern Surgical and Gynecological Association will meet in Atlanta, Ga., Nov. 12th and 13th. The preliminary program has been received, and a full and interesting session will be held.

THE Mississippi Valley Medical Association will meet in Louisville, Oct. 8th, 9th and 10th. An attractive program has been received. Meeting promises to be one of the most important ever held.

MEMPHIS HOSPITAL MEDICAL COLLEGE.—The fall and winter session of this institution begins October 27 and continues five months. The promise is that the coming class will be the largest that has ever graced its halls. Students of medicine will do well to correspond with the Dean before they go elsewhere for medical lectures.

THE Tri-State Medical Association of Alabama, Georgia and Tennessee, will be held in Chattanooga, Oct. 14th, 15th and 16th. The partial list of papers which we have received points to a large and representative meeting.

THE MEMPHIS JOURNAL OF THE MEDICAL SCIENCES *vs.* THE SOUTHERN PRACTITIONER. — In an editorial diatribe WE are taken to task by the *Southern Practitioner* for having had the temerity to express opinions which were at variance with the encomiums published in *its* pages ! ! !

THE attention of our readers is called to the card of Van Vleet & Co., the wholesale druggists of Memphis. It will well pay physicians visiting the city to call and make the acquaintance of this firm and inspect their stock, which is replete in its every department.

AT a meeting of the editors it was decided to reduce the subscription price to $1.00 per year. This ought to bring it into the office of every practitioner in the Mississippi Valley. Old subscribers will have their time extended accordingly.

CHANGE OF DATE OF MEETING OF TRI-STATE MEDICAL ASSOCIATION.—The Committee of Arrangements have postponed the next meeting of the Tri-State Medical Association until November 19th and 20th. The titles of all papers should be in the hands of the Secretary, Dr. S. A. Rogers, on or before the 24th of October, 1890, so that they may be placed upon the program.

COCA has maintained its reputation as a powerful nerve stimulant, being used with good results in nervous debility, opium and alcohol habit, etc. The highly variable character of the commercial drug makes it uncertain, however. Robinson's Wine Coca (see adv.) we believe to be a uniformly active article, it being prepared from assayed leaves, the percentage of cocaine being always determined by careful assay.

THE vaccine virus of the Missouri Vaccine Farm is of exceptional quality. Only three failures in primary cases out of nearly 300 vaccinations is certainly a great record. This was the experience of the Memphis Board of Health last month.

ATTENTION is called to the card of Lehn & Fink regarding Chloralamid, the new hypnotic. Every physician should write for their publication.

RENTZ & HENRY'S Elixir of Three Chlorides and Sol. Triple Hydriodates are standard remedies and deserve a trial. See their new advertisement.

THE Cincinnati Sanitarium is an institution which has increased in popularity since its erection eighteen years ago. We call attention to their card.

THE

Memphis Journal of the Medical Sciences.

MEMPHIS, TENN., NOVEMBER, 1890.

DEPARTMENT OF

PRACTICE OF MEDICINE & THERAPEUTICS.

EDITED BY

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DIGITALIS IN HEMORRHAGE AND FEVER.

A. D. BAKR, M D., CALAMINE, ARK.

In the administration of drugs their physiological action should never be forgotten, and if a condition is present similar to their action they should be withheld. Digitalis kills by causing tetanic spasms of the heart, first causing rapid and irregular action, followed by arrest of action in systole. In other words death by digitalis is caused by the heart contracting so firm and fast that the circulation is arrested. The diastolic action of the heart is so weakened that it is not allowed to fill with blood. The physiological action of digitalis causes the heart's action to become decidedly more forcible and slower, and lengthens the period of systole.

Its use in heart failure, from loss of blood, exhaustion from typhoid fever, malarial fever, pneumonia, and a number of other diseases that induce debility and exhaustion, is surely a mistake, and one that those pursuing should think seriously of. Heart failure from hemorrhage, according to Barnes, is due to "the fact that the drainage circulatory system labors,

not alone under the loss of the vivifying element, but also under the purely mechanical difficulty of vacuity. The heart and arteries have nothing to contract upon." The treatment of such a condition is certainly not fulfilled in the use of a drug, whose action aggravates instead of overcoming its difficulty. The heart has power to contract with sufficient force in such cases, if only supplied with a circulating medium.

In typhoid fever the heart failure is often due to a prolonged and excessively high temperature. When the heart failure is due to the intensity of the fever the use of digitalis would be irrational, as it would undoubtedly be dangerous to administer it in doses large enough to reduce the temperature. And here again the contractile force of the heart is not at fault, but it contracts upon its contents before it becomes sufficiently filled, and thus produces a rapid and weak pulse. This condition is similar to that produced by digitalis when its full physiological action is obtained, and it seems to me that its use would aggravate the difficulty.

When the heart grows weak simply from exhaustion it can have no place in the treatment of this symptom, as it is in no sense what we term a tonic or a stimulant. In pneumonia the same objections are equally good.

I once had an opportunity of seeing a case of poisoning with digitalis; it was given without the knowledge of the attending physician, to a woman suffering with pneumonia. The inflammation involved nearly the entire right lung, accompanied by excessive degree of fever, and consequently a very weak and rapid pulse. The tincture of digitalis was given in ten-drop doses at intervals of from one to two hours, and under its influence the heart's action became very irregular and rapid, and the radial pulse was scarcely perceptible. The urine was passed involuntarily, in fact it dribbled almost constantly. The patient was saved only by the energetic use of brandy and one drop of fluid ext. aconite root repeated every hour.

In conclusion I wish to say that I believe there are very few conditions in which digitalis is a heart tonic, and that it certainly is not those cases in which there is a rapid and a feeble pulse.

THE PROPHYLAXIS OF DIPHTHERIA.

REV. BY WM. KRAUSS, M.D., MEMPHIS, TENN.

Prof. F. Loeffler, who first isolated and cultivated the Klebs diphtheria bacillus, read a very interesting paper at the last International Congress on "What Measures Should We Employ for the Prevention of Diphtheria."

The bacillus having been isolated, propagated and successfully inoculated in all countries is now known to be the cause of diphtheria. It first develops and multiplies locally, where it produces a toxine, which again causes local lesions in vessels resulting in exudation; is finally taken into the body where it causes general symptoms. The bacillus remains in loco, but opens the way for other organisms. The horribly fetid breath of many diphtheritic patients shows the activity of various saprophytes.

Patient is to be most rigidly isolated. Contact with healthy individuals must be strictly forbidden. Excretions from mouth and nose must be caught in cloths, and these thoroughly disinfected. The room must be stripped of everything not absolutely necessary. Utensils must be disinfected before they are again put into use.

To the question: How long can a patient furnish infectious excretions? He gives a case in practice where bacteriological examinations were made daily, and excretions found still infectious nearly three weeks after temperature returned to normal.

For the differentiation of diphtheria from other throat affections nothing is conclusive but bacteriological examination; all doubtful cases should be reported as diphtheria until diagnosis is clear.

Epidemiologically, a case is cited where a family was taken with diphtheria a year after the house had been fumigated—"of course only with sulphur." Pieces of membrane still yielded cultures in fourteen weeks, never in sixteen weeks.

The following twelve points conclude this excellent paper:

1. The bacillus found in excretions of diseased mucous membranes is the cause of diphtheria.

2. Bacillus is disseminated by excretions deposited on articles within reach of patient.

3. Viable bacilli remain several days after disappearance of membrane.

4. Patient should be strictly isolated as long as bacilli remain in excretions. Children should remain from school at least four weeks.

5. Bacilli are viable in fragments of dried membrane for four or five months. Every article in room should therefore be either boiled in water or subjected to a current of steam at 212° F.; floors to be scrubbed repeatedly with 1.1000 bichloride solution; walls and furniture rubbed down with bread.

6. Researches on viability of bacilli in moist state are not yet completed; damp rooms should be thoroughly dried, and a flood of light admitted before they are used again.

7. Bacilli still grow at 68° F.; they grow readily in milk. The sale of milk from dairies in which diphtheria abounds should be prohibited.

8. Diphtheroid diseases of various animals are not caused by bacilli of human diphtheria. Diphtheroid diseases of animals are not to be feared as sources of diphtheria in man.

9. Observations of Klein, on etiological identity of the cat disease with diphtheria in man, are not proof, and need further corroboration.

10. Lesions of mucous membrane favor the adhesion of diphtheritic virus. Susceptible individuals may, however, be infected without these lesions.

11. During prevalence of diphtheria the mouths and throats of children must be kept especially clean. Gargles and mouth washes of aromatic waters and weak bichloride solutions (1.10,000) should be used as a preventive.

12. Meteorological factors influencing development of diphtheria favorably are not known to exist.

METHODS OF TEACHING.—"If we are not greatly mistaken," says the *Peoria Medical Monthly*, "the signs of the times point unmistakably toward the abolition of the didactic lecture in medical teaching, and the substitute therefor of laboratory and clinical work and daily recitations and quizzes. There

is no doubt but that the latter course would be the best in all respects for the student, but it would be extremely hard on many professors, since it would rob them of the glory of posing and spouting before the class." Rather rough on some of the professors.

TREATMENT OF HAY FEVER.

FRANK HAMILTON POTTER, M.D., BUFFALO, N. Y.

Just as long as the pathology of hay fever is in the present chaotic condition, its treatment will be uncertain and many times most unsatisfactory. I do not mean that there is no pathology of this disease; on the contrary, there is a great deal, as a paper we have just listened to so clearly shows, but it has not yet reached that definiteness that can give us a fairly sure basis upon which to form a rational treatment. Some cases get well—there is no doubt of that—under careful and painstaking management, and such a result is one of great satisfaction to all concerned. Many cases, however, that have been reported as cured are really far from that condition, and could they appear here at this moment would demonstrate to you the uncertain meaning surrounding the word "cure" as it appears in our medical literature. All that we can be expected to do this evening is to show the line of treatment that should be adopted, in the light of our present knowledge, when we have to do with a case of hay fever, whether it comes to us under that plebian name, or under the more aristocratic one of rose cold, or, again, under perhaps the more scientific one of hyperesthetic rhinitis.

In the first place I desire to state that, as far as I can ascertain, no case of this disease has been cured by constitutional treatment alone. Many years elapsed between the year 1819, when the disease was first described by Bostock, and 1881, when Daly first called attention to the local lesions generally found in the nasal passage in this disease, and it is not too much to say that in all that time its treatment can be fairly described as *eminently unsuccessful*. On the other hand, local treatment alone is short-sighted and deceiving. Temporarily, its results are brilliant, but, as a rule, they do

not last, and a case that has been cured in this way often returns to torment the operator and belie the statistics. It is just as bad to condemn local treatment as to condemn constitutional treatment, and the narrow generalist is as much bound down by the green withes of a confining theory, as is he who thinks the nose is the fixed point around which all things revolve.

Broadly, then, we must look at this disease from many points of view, and consider what we have learned:

I. As to the treatment during the attack.

II. As to the local treatment; and

III. As to the general or constitutional treatment.

By the first, we seek to palliate the severity of the attack; by the second and third, we seek to prevent the attacks recurring. It is now very generally conceded that medical treatment should not be undertaken during the attack. The latter may be lessened in its severity in many ways, but thorough treatment should be postponed to the period of immunity.

We all appreciate today that change of locality will, in a large number of cases, prevent or stop an attack. This is a measure that cannot be employed by many, either on account of the expense or other reasons. When nothing prevents this indulgence, the periodical return of the disease is a most admirable excuse for a journey, and if locations can be found where the sufferer is free from it, he would be foolish not to take advantage of that fact. Something can be done, however, to relieve the patient that must stay at home. He must obey, with perhaps more strict observance, the laws of personal hygiene than is necessary for one not a victim of the disease. He may be in certain directions more sensitive than others. For instance, he may take cold easily, and when this is so he should strive to make himself less liable to this, by the proper employment of the cold bath, the judicious selection of clothing, etc. Or certain articles of diet may disturb him, and then, of course, they should be avoided. We cannot repeat in detail what is so well known to the profession, but simply mention the importance of hygiene in the conduct of a case of hay fever, because we believe it has much to do

with the comfort of the patient. During the attack the nasal passages are generally inflamed and very sensitive, and a watery mucus is constantly flowing from them. They should be washed out frequently with some bland, unirritating solution, and then the surfaces covered with a coating of an oil to protect them from dust. When dust or pollen is especially offensive, a small piece of fine sponge inserted into each nostril will still further protect them. Cocaine has, on account of its peculiar properties, come into almost universal use by hay fever patients. There is danger in its use, and when given to a patient he should be told that too frequent spraying of the nose with it will very likely disturb the nervous system and produce restlessness, sleeplessness, and the like. It should be applied after the nose is washed clean, before the oil is used. A two or four per cent. solution is all that is required.

Internally a combination of atropia and morphia is useful. They must be given in small doses frequently repeated. Sulphate of atropia 1.200 gr. and muriate of morphia 1.32 gr. is a good proportion. It has, occasionally, been my good fortune to stop or prevent a threatened attack by this treatment. Success with it, however, is not universal, and it cannot be considered a specific.

We have now to consider the management of the patient when free from the disease.

Looking first to the local treatment, we find that we must seek to relieve a general hyperesthetic state of the nasal mucous membrane, and also in the vast majority of cases to remove lesions of an obstructive character. The means employed for the correction of the latter often serve to relieve the former, and thus it would seem that they are frequently dependent the one upon the other. These obstructive lesions are of many kinds, and may be found either of the hard or soft tissues—frequently they are of both. They may be slight and projecting or so large that they prevent breathing through the nostrils. They may be hypertrophic or neoplastic in their character. Whatever may be their organization, they should be removed. This is especially so if they cause contact between the walls of the nostrils. The pressure this contact produces is not only a source of local irritation, but

causes reflex symptoms, widespread and aggravating. It is not our purpose to describe the methods now adopted to get rid of these obstructions. That belongs to the realm of the specialist. It will suffice if we are able to impress upon each one here, that these things must be looked into and corrected in order to give hay fever patients the benefit of the best treatment. We are not likely to control the disease unless this is done.

Where the operative treatment does not relieve the highly sensitive condition of the nasal mucous membrane, or again, where the latter exists without obstructive lesions requiring operations, then the hypersensitiveness can be controlled by mild and superficial alteration of the nerve ends found in the membrane. This is an important part of the treatment, frequently, in my opinion, overlooked in the management of these cases. Now, as to the general or constitutional treatment, simultaneously with the correction of the local disease we must ascertain in a systematic manner the life history of the patient, particularly as to hereditary influences, temperament, etc. In the majority of cases we find this disease appearing in persons of the so-called neurotic habit. They may also show other departures from the normal that must be taken into account. We must consider their personal hygiene, the diet, exercise, bathing and so on. In a word, we must strive to place them in a condition of the greatest resistance. This is so easily said and so hard to accomplish, that we must frequently be content with an approach at what we aim rather than its full realization. In addition to all this, drugs have here an important place, and will well repay the difficulty in finding the proper combination for any given case. Nerve tonics and alteratives have the first consideration.

Mackenzie of Baltimore, who is inclined to consider the disease as a pure neurosis, relies much upon the following formulæ:

I. ℞ Zinc phosphid., gr. $\frac{1}{16}$; quin. sulph., gr. ii; ext. nuc. vom., gr. $\frac{1}{4}$. M. Ft. pil. no. I. S. To be taken before meals.

II. ℞ Liq. Arsenic, et hydrarg., iodid., gtt. iii., ad v. S. In a wineglassful of water, after meals.

These are really valuable, and will indicate the kind of remedies to be employed. Besides those in the above combinations, we find recommended by various observers belladonna, hydrocyanic acid ,valerian, assafetida, musk, lobelia, amber, the bromides and iodides, chloral, opium and hyoscyamus. Iodine, in some cases, will be found of great value. A very pleasant way to prescribe it is in the form of hydriodic acid. The important point, as already suggested, as far as drugs are concerned, is to find the formula that will act with benefit upon a given case. This will often tax the patience and skill of the physician, but frequently, after repeated trials, success will follow when least expected. One or two other things deserve mention. The cold douche to the spinal column has a decided therapeutic value in these cases; most authors, from Gordon, who first, in 1829, mentioned it, to Bosworth, have regarded it with great importance. The latter author makes some pertinent suggestions as to its application. It is something more than a cold bath. The water must be dashed against the spine either by means of the shower bath or else by an assistant. A simple method is to sit in the bath-tub and press a sponge full of cold water over the back. The intermittent application of cold in this way acts as a general tonic to the whole nervous system. The patient feels better at once, and after becoming accustomed to it, considers the day not rightly begun without it. If this paper aimed to be exhaustive, many other details in regard to treatment would have to be studied. What has been said, however, will indicate to a slight extent the manner of dealing with hay fever cases. It is a broad subject, still far from settled. And this being so, it is becoming in anyone undertaking the treatment of these patients to recognize its complexity, and above all to remember that various factors enter into it, that it has a local as well as a general element, and that the best treatment will consist of special and constitutional therapeutics combined.—*Buffalo Med. and Surg. Jour.*

DEPARTMENT OF

GENERAL SURGERY.

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SURGICAL CLINIC — FIRST WEEK, AT MEMPHIS HOSPITAL MEDICAL COLLEGE.

PROF. W. B. ROGERS.

REPORTED BY IRVING EDGINGTON.

Amputation—Castration—Hydrocele—Synovitis—Arthritis—Pyarthrosis Excision of Elbow Joint—Fractured Tibia—Fracture of Radius and Ulna.

Case I. Reamputation. Lewis Green, colored, 17 years of age, fell from a moving freight train four weeks ago; his right foot at ankle joint was crushed by passage of car wheel. Primary amputation was done by attending surgeon, at lower third of leg. The flaps sloughed, and the patient is now presented with the bones covered with granulations and protruding two inches beyond the soft parts.

It was explained that reamputation was indicated, firstly, because of the length of time it would require nature to cover the projecting bone and granulating surface with integument; secondly, a conical cicatricial stump which would follow, would be unfit to bear the weight in wearing an artificial limb.

The case illustrated the non-advisability, as a rule, of primary amputations, in cases of injury to the extremities produced by rapidly revolving railway car wheel. It is next to impossible for any surgeon to say exactly how far above the line of passage of a wheel injury to the soft tissues has been sustained. Hence, in primary amputation either too much tissue is liable to be sacrificed, or too little; in the latter case sloughing of the flaps will occur.

Operation. Double flaps—anterior and posterior—bones sawn 5½ inches below knee joint. Arteries secured with cat gut ligatures; silk worm gut drain; wound closed by deep and superficial sutures. Dressed aseptically. Esmarch bandage was used, and operation proved absolutely bloodless.

Case II. Hydrocele. Rev. Geo. Watts, 48 years, white, a private patient from Arkansas, kindly consented to come before the class for their instruction. He presented pear-shaped tumor within the right scrotum. One year had elapsed during the growth of the tumor, which was painless to manipulation. There was no impulse on coughing; the cord above the tumor was normal. Elevation and manipulation failed to diminish the size of the enlargement; hence, by exclusion, it was neither hernia nor varicocele. Fluctuation was distinct, and by light translucency was shown, proving clearly a case of hydrocele of tunica vaginalis.

The various methods of treatment were explained, and that by carbolic acid injection was practiced. Two drams of the fluid were drawn through a large hypodermic syringe needle, into a test tube; the syringe containing thirty minims pure carbolic acid was then attached to the needle and the acid thrown into the sac, still containing about five ounces of fluid. No pain was experienced, and the patient left the table. It was then explained that gradual absorption would follow, and in a few weeks the sac would contain only the normal moisture. In some cases a second or third injection was necessary, but usually a single painless operation resulted in a cure.

Case III. Castration. Dan. Weston, 27 years, presented with tumor in left scrotum. History of slight pain in left testes, with gradual enlargement, extending over period of seven months. Two months ago, abscess formed at lower anterior aspect of tumor, which had become adherent to scrotum. Abscess opened and integument gradually disappeared over a space of the size of a silver half-dollar. At this time there is a discharge purulent in appearance—the edges of the ulcerating surface slightly raised. The tumor, which includes the testes, is the size of an ordinary hen egg;

posteriorly it is smooth and elastic. The scrotum for several inches around the ulcer is infiltrated and slightly inflamed. The cord is intact. There was no history bearing out the idea of the enlargement of the testis being due either to syphilis, tuberculosis, or gonorrheal orchitis. The fact of there having been at no time any tendency to recovery in the parts, although judicious medical aid had been sought, led to the suspicion of the growth being sarcomatous in nature. By excluding first one and then another of the various intra-scrotal tumors, the diagnosis of sarcoma was made.

Operation. Parts cleanly shaven and washed with bichloride solution. An incision beginning at external ring was carried along the axis of the cord a short distance downward, then around the left half of the scrotum, which was entirely removed with the contained tumor. The cord freed of its coverings was ligated en masse. The wound was closed with continuous suture, gauze having been packed at upper end of incision.

(The elastic posterior surface of the tumor proved to be symptomatic hydrocele. Microscopical examination by Dr. Wm. Krauss showed the tumor a spindle-celled sarcoma.)

Case IV. Fracture of tibia, compound; plaster Paris dressing. Tom Gates, colored, 41 years of age, received injury by an iron column falling on his right leg just three inches above ankle joint, producing compound fracture. The accident occurred three weeks ago. At first dressing, the wound being small, all air was pressed out and the wound closed. Success had followed the treatment, and today he was presented and plaster of Paris splint was put on. The indications in the treatment of compound fracture, with and without comminution, accompanied by slight and by serious damage to soft parts, presenting small and large wounds in the integument, etc., were fully explained.

Case V. J. Rehard, brakeman on railway train, had met with injury to left forearm. Examination showed a double fracture of both bones of the forearm. The accident occurred sixteen days ago, and the soft tissues were so much damaged that little hope had been entertained of saving the hand and

forearm. At present examination slight effort at union was going on. The limb was encased in plaster Paris, extending from hand to four inches above olecranon process.

This case illustrated a complicated fracture, by reason of the injury to soft tissues as well as multiplicity of fragments. The middle fragment of each bone being about 2½ inches in length, and the lines of fractures in each bone being on same level.

Case VI. Pyarthrosis of knee joint. Henry Gates, 43 years, presented numerous fistulous openings about the left knee joint, pus exuding freely. The history of his case was the usual one of arthritis resulting in pus formation within the joint. There was no defined history of injury. Numerous burrowings of pus were detected above and below the joints. All sinuses and pockets were laid open and curetted. Both condyles of femur and upper surface of tibia were eroded over greater part of articular surfaces. The joint was curetted and incisions so located as to drain thoroughly. All curetted and incised surfaces were irrigated with strong bichloride solution and liberally packed with iodoform gauze. The patient sent to ward. It was explained that when improvement had taken place in the parts a resection of the knee joint would probably follow. At present sitting patient's general condition too poor to justify amputation of thigh, and local as well as general condition forbid all hope of success following resection—hence palliative treatment adopted.

Case VII. Resected elbow. Henry Aydelott, 52 years, private patient, from Arkansas, consented to present himself for dressing. Resection of right elbow had been done seventeen days ago for necrosis of ulnar, radius and humerus at the common point of articulation. The case presented the history of osteitis (of lower end of humerus), synovitis, followed by implication of entire joint structures. Inflammation had been of subacute or indolent character, from time of origin to time of operation.

At time of operation patient's pulse was continuously above 120, with evening temperature 102. Pus had burrowed up and down the limb, and numerous sinuses were in existence with fistulous openings mostly on outer aspect of joint.

Two parallel incisions five inches in length, one on post internal the other posterior external aspect of limb, had given free access to the necrosed bone, and two inches of humerus, with about two inches of each of radius and ulna were removed. Improvement in general condition began at once, and at this time patient eats and sleeps well, experiences no pain, and is able to go out regularly.

The wounds have entirely filled and cicatrization is rapidly going on. Perfect use of the hand and fingers was shown. The forearm is at nearly a right angle to arm and will prove quite serviceable.

Case VIII. Synovitis. Geo. Arnott, 38 years, presented enlargement of right knee. This enlargement was irregular in outline, showing marked bulging at the weaker points in the capsule. The patella floated. There was marked tenderness on pressure on lateral ligaments. The case was pronounced subacute synovitis. The history was that of slight pain, with sense of weakness in the knee joint; had been in existence only a few weeks, and did not follow injury. No other joints involved, nor history of rheumatism. The joint was very much distended, hence the aspirator was used to draw off the fluid; five ounces removed. The limb was then immobilized by means of plaster of Paris splint, so arranged as to leave the knee joint exposed for the application of pressure by means of rubber bandage; the pressure thus exerted would favor absorption of remaining fluid. The rest thus secured to the part was the main point in the treatment.

Case IX. Synovitis, with osteitis. Frances Lewis, 27 years, female, with no venereal history nor evidences of specific cause for joint inflammation, presented synovitis of right elbow with inflammation of the lower end of humerus of same joint. The pain began eight months ago, followed by gradual fullness of the joint, with pronounced interference with the function of the joint. The indications were to give rest to the part, and to that end the limb from wrist to axilla was enclosed in plaster Paris splint. Also hydr. bichlor. kali iodide, with fl. ext. phytolacca, were prescribed.

TREATMENT OF TUBERCULAR JOINTS AND ABSCESSES BY INJECTIONS OF IODOFORM.—Bruns, before the German Surgical Congress (*Centralblatt fur Chirurgie*), recommended the injection of iodoform into cold abscesses and tubercular joints. The foundation of the treatment, he thought, lay in the known power of iodoform over tubercular granulations. The iodoform was used in the form of an emulsion in glycerine or olive oil, one part to ten or twenty. The preparation is carefully sterilized before each injection. After weeks or months the abscess becomes smaller, and in from two to four months completely disappears. In Bruns' clinic one hundred cold abscesses have been treated in this manner, and 80 per cent. have been cured. Of these, ten have been cases of burrowing abscess from caries of the vertebræ, in which a permanent cure resulted, so that Bruns believes that the caries itself has been healed. The treatment is also recommended in tubercular empyema.

Similar good results were obtained in the treatment of tubercular joint affections, as the writer demonstrated in over fifty cases. In parenchymatous synovitis or capsular fungus, a hollow needle is passed into the joint and from one-half to three drams of the emulsion forcibly injected. If the abscess is in the neighborhood of, or has broken into a joint, then the cavities should be emptied and so much of the emulsion injected as will just distend the abscess cavity or the joint. Fixation of the joint is only necessary when considerable pain has been caused by the injection; the rule is that it subsides rapidly, and the patient may be allowed carefully to use the joint. The parenchymatous injections should be made as often as once in eight days, while in the cases of enlarged joint cavity, or peri-articular abscess, each two to four weeks is sufficient. The first sign of improvement—lessening of the pain—is not to be looked for under six or eight weeks, the swelling decreases after the first injection and at last completely disappears. Peri-articular abscesses shrink to small knots that cause no further trouble. Motion in the joint may be partially, or indeed, fully restored. In severe cases and old people, a complete recovery is not to be looked for, though here we can expect a diminution of pain and swelling

with improved use. The author recommends the operation because of its simplicity, adaptability, results, and freedom from danger.

In the discussion Heusner said that in the past four or five years he had treated numerous cases in this way, with excellent results. He specially mentioned a woman with tuberculosis of the wrist joint which was cured by ten injections.

Trendelenburg had treated 135 cases in this way. Results were various, but in 68 per cent. of the cases it could be said to have had a marked influence upon the disease, though cure was not an invariable result. The wrist seemed favorably affected more frequently than other joints. He also used the method in tuberculosis of the soft parts, lymphatic glands, testicles, etc. Several injections into the lungs had also been made.

Riedel inquired what relation a sequestrum had to the treatment. He was answered by Krause that frequently spondylitis healed under this treatment, notwithstanding the presence of a sequestrum. Heusner said that in the cured cases no changes remained, while in those that were not affected the disease remained as it was before treatment. The case of the woman with the tuberculous wrist had originally been set down for amputation.—*Med. Prog.*

THE TREATMENT OF SCROFULOUS GLANDS.—After a discussion of the identity of scrofula and tuberculosis, Dr. Treves proceeds to the general treatment of a case of scrofulous gland disease under the following heads:

1. The patient should be placed under the best hygienic conditions.

2. Since a large proportion of strumous patients possess a feeble circulation, the skin from the neck to the ankles and the wrists should be covered with wool.

3. In the matter of medicines, there is little beyond the well-worn circle of iron, arsenic, quinine, and cod-liver oil.

The local treatment embraces the following points:

1. Any disturbance of the periphery, whence the affected glands derive their lymph-vessels, must be dealt with as a matter of the first importance. In the great proportion of

instances a chronic inflammation is induced in the gland by some trouble active in the area from which the lymphatics concerned arise.

2. Specific local applications to the glands have met with but discouraging success.

3. The most important local measure consists in giving rest to the part.

4. When suppuration has occurred where a sinus persists or where it would be difficult to remove the relics of diseased glands, scraping is allowable.

It should under no circumstances be employed in cases where the skin is still sound.

Excision offers the simplest, safest, and the most certain method of treatment.—*Arch. Pediatrics.*

The *Bulletin general de therapeutique*, 1890, No. 2, contains a resumè of gastrostomies since Sedillot's operations in 1849 and 1853. The high mortality, 51 per cent. of simple scar strictures, and 72.8 per cent. of carcinomatous cases, is accounted for by Le Fort by the circumstance that the influence of saliva is lost, and hence gastrostomy is to be considered only a temporary measure until œsophagus has been made pervious again. Thus, of 29 recovering from operation, only 17 survived permanently, because saliva was withheld from stomach. The following conclusions are drawn:

1. With rare exceptions the rule holds that food is insufficient when unmixed with saliva.

2. As soon as gastrostomy is successfully done, all efforts are to be directed toward making œsophagus pervious for the saliva, and to maintain it so.

3. As the latter is conditional for preservation of health and life, and as gastrostomy itself kills over half the cases, dilatation should be attempted in first order, and only when this is hopeless, the operation to be performed.

Le Fort prefers elastic urethral sounds, filled with lead, previously melted, beginning with No. 20 (fr.) attached to a guide of No. 5, and dilates gradually to No. 30. Malignant strictures can of course not be thus treated.—*Holz, in Ber. Klin. Woch.*

SUPRAPUBIC LITHOTOMY with immediate suture on a patient 69 years old; primary union. Dr. Kehr, Halberstadt. Size of stone, an existing hydrocele, and a false passage, contra-indicated the low operation. Stone was too hard for lithotripsy. Patient was nervous, restless, could not lie in bed, had a severe emphysema. Hence there was no difficulty in choice of operation, viz.: suprapubic section, removal of stone, and immediate interrupted suture with sublimated silk; tampon of prevesical space. On account of false passage, soft catheter could not be introduced into bladder, and a metallic one had to be used. The tip of this irritated sutures, and on second day succeeded in getting in a soft one. Bladder was emptied every 2 to 3 hours, day and night, and washed out with warm boric acid solution. In spite of these unfavorable surroundings, patient was out in 12 days, and left clinic in three weeks.—*Ber. Klin. Woch., 1890, No. 9.*

E. VOSWINKEL.—Hydrocele at surgical clinic in Heidelberg. Author reports on upward of 90 cases, with brief histories. Forty-eight cases were treated by aspiration and injection of iodine solution. Average duration of recovery, 7 to 8 days, with 6 recurrences. Several cases of simple paracentesis, and some in which carbolic acid and corrosive sublimate were injected. Twenty-five cases with radical operation; average time of recovery, 23 days; one recurrence. In four cases, testes were removed.—*Gavie, Tubingen.*

A COMPEND OF SURGERY for Students and Physicians. By Orville Horwitz, B.S., M.D. Third edition, revised, etc. P. Blakiston Son & Co., Philadelphia, Pa. 1888.

This book is quite a convenient and instructive companion and should find favor with every medical student. We take pleasure, after carefully examining the work, in recommending it.

The effect of mind over matter was shown by a physician who gave 100 patients sweetened water, and 15 minutes afterward rushed in and informed them that by error he gave them an emetic and for them to "prepare to vomit." Eighty *did vomit.—Myer Bros.' Druggist.*

DEPARTMENT OF

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LAPAROTOMY vs. ELECTRICITY IN ECTOPIC PREGNANCY.*

Dr. Wathen said: Electricity, the only feticidal means now recognized as orthodox by physicians who practice destroying the life of the fetus in ectopic pregnancy without laparotomy, is no longer used for this purpose where the pregnancy has continued beyond three and a half or four months, and is seldom used after the third month. At this time the fetus cannot be killed except by electro-puncture, and the complications and the deaths consequent to this practice have been so numerous that the most radical advocates of electricity are afraid to introduce the electrodes into the gestation sac. The use of electricity in extra-uterine pregnancy is practically confined to the United States, and while it is advocated by men of recognized ability and learning in obstetrics and gynecology, I am constrained to believe that very soon it will have no support.

The immediate and subsequent results of electricity as a feticide, are put in the most favorable attitude in a paper by Dr. Brothers in the February, 1890, issue of the *American Journal of Obstetrics and Diseases of Women and Children.* Every fact supposed to favor its use is made to sound its praise extravagantly, but the many unfortunate results that speak volumes against its use, are quietly passed by, or an effort is made to brush them aside. Still the conclusions of the author furnish the strongest proof in favor of laparotomy.

These statistics compared with the statistics of laparotomy

* An abstract of a paper read by Dr. Wathen of Louisville, before the Tri-State Medical Society of Tennessee, Alabama and Georgia, at Chattanooga, October 15, 1890.

show conclusively that the use of electricity in extra-uterine pregnancy is more dangerous, granting that there was no error in diagnosis.

But just here we have another argument in favor of laparotomy; for the difficulty, and sometimes the impossibility, of diagnosticating extra-uterine pregnancy in the early months is so manifest to experienced physicians, that it would be ridiculous to claim that in all these cases pregnancy existed; while in the cases where laparotomy is done a diagnosis may positively be made by seeing the embryo or the chorionic or placental villi. If the embryo or fetus in an extra-uterine pregnancy is killed by electricity, a more or less diseased condition of the pelvic structures is left that endangers the health or the life of the woman; the dangers usually being increased as pregnancy advances; but if a laparotomy is done there is no obstructed tube, or other pathological condition left, and if the woman recovers from the immediate effects of the operation she is entirely cured. Her life is no longer in jeopardy because of the danger of pelvic abscess, sepsis, or exhaustion following an effort to discharge the suppurating contents of the gestation sac through fistulous tracts into the rectum, vagina, bladder, or through the abdominal walls. If we could eliminate the cases where there was an error in diagnosis, we would find that the mortality from the use of electricity and the bad after-results are far in excess of what follows laparotomy in the practice of experienced operators.

In an examination of Brothers' report of the subsequent behavior of twenty-five cases observed at periods varying from one to eight years after the employment of electricity, we must be impressed with the fact that at least fifty per cent. of all cases carefully observed, had thickening or distinct tumor, that may at any time require laparotomy to save the woman's life, or to cure her of confirmed invalidism.

In cases where laparotomy has been done the mortality has not exceeded five per cent., and nearly all the women that recovered from the immediate effects of the operation were permanently cured. Most of these operations were done after rupture of the sac, where the conditions are not so favorable in laparotomy work.

Laparotomy, in all cases where the advocates of electricity would defend its use, is so simple and so free of danger that I believe an experienced operator could save at least ninety-five per cent. of his patients, probably ninety-nine per cent. And before the end of the third month there is no condition requiring laparotomy where the operation is more easily done or the immediate or subsequent dangers fewer. In fact, its simplicity, compared with the operation for many pathological conditions in the pelvis is so decided, that in the practice of a successful laparotomist, who observes the rules of clean surgery, and adopts the most approved technique, the patients should recover. Tait's operations have been for ruptured tubal pregnancy, and he reports but two deaths in more than fifty patients. The first woman he operated on died, because he did not then know the correct technique in such cases, and his second death was where the woman was in fatal shock before the operation.

One of the reasons given in favor of electricity is, that these women cannot always be operated on by an experienced laparotomist. Nor can electricity be always used by men who are familiar with its successful use in such cases. If it is necessary to refer the woman to some specialist in laparotomy, it will as often be necessary to refer her to some specialist in electricity, who has all the electrical appliances necessary for good results in such work.

The services of an experienced abdominal surgeon may be obtained as easily as the services of a man experienced in the successful use of electricity. The operation is so similar to the operation for the removal of enlarged and slightly adherent ovaries, that a description of it would be unnecessary. If the sac has become adherent to any pelvic structure, it should be gently but quickly separated and ligated at its base with a double ligature, being careful to include both the distal and proximal ends of the vessels.

In conclusion I wish to show you two specimens which will illustrate some of the phases of extra-uterine pregnancy. The first is a placenta with the fetus attached, showing the ovaries and tubes successfully removed by me some months ago. This is a tubal pregnancy that ruptured into the folds

of the broad ligament. The second is a uterus with its adnexa showing a ruptured tubal pregnancy into the abdomen at about the sixth week. This was removed post mortem by Dr. Kelch. The rupture occurred thirty-six hours before death. Dr. Kelch made a correct diagnosis soon after the rupture and urged the patient and her family to allow a laparotomy. This was refused until an hour before her death, and when I entered her room she was dying. Her life could have been saved had she consented to an early operation.

BOOK REVIEW.

THE BIOGRAPHY OF EPHRAIM McDOWELL, M.D., "The Father of Ovariotomy." By his granddaughter, Mary Young Ridenbaugh. Together with articles relating to Ovariotomy, and letters from members of the medical profession in Europe and America. 8vo., pp. 558. Price in full Cloth, $4; in half Persian Morocco, cloth sides, etc., $5; in full Persian Morocco, beveled sides, gilt edges, $6. For sale by the author, P.O. Lock Box 372, Philadelphia, Pa.

We have just received a copy of this book, which has been elegantly executed by the publishers, and hasten to give a short review.

In this day, when ovariotomy is practiced with such freedom and ease, we realize but slightly the heroism and moral courage required to do the first operation. Whilst country practitioners are sometimes in advance of others in many things connected with medicine, it seems quite out of the usual run of things that whilst the hospitals frequently contained cases of ovarian tumor which terminated fatally, where post-mortems were made, and where also considerable authority could have been exercised during life, that a country doctor should be the first to have the wisdom and moral courage to attempt such an operation. We at this time can but feebly realize the internal force, the stupendous heroism possessed by the author of ovariotomy.

"Dr. McDowell had seen certain operations performed by his overseer upon animals, and came to the conclusion that the lives of many unfortunate women might be saved by operations of a similar character. After many experiments he determined to attempt the operation, and make, if possible, a discovery that would be of lasting benefit to the world. Mrs. Annie Crawford of Green county, Ky., the heroine to

offer herself as the first subject, was, at the beginning of the present century, afflicted with an ovarian tumor of unusual size, and certain death stared her in the face. The growth had added about sixty pounds to her weight, and there was in those days no help or chance of escape. Then she heard of Dr. McDowell, and a ray of hope filled her despairing heart. Dr. McDowell told her that the operation was an experiment and that whether or not she died under the knife it was impossible to foretell, but if she was willing he would try, and do the best he could. Mrs. Crawford replied: 'It is life or death with me. Anything is better than what I am suffering, with certain death staring me in the face.' She determined to run the desperate chance and undergo his operation. Sixty miles on horseback she traveled, with a tumor of over sixty pounds weight, and her suffering was terrible. So frightfully was she excoriated that when she arrived at Dr. McDowell's house in Danville, it was evident that no operation could be performed for several days.

"It must be remembered that in those days there were no anesthetics, and not until forty years later was anything discovered to alleviate the pain and suffering attending an operation. Armed with nothing but her own heroic fortitude, Mrs. Crawford lay down upon the operating table and waited the result of the first operation of ovariotomy.

"The fact that the operation was to be attempted in the town became known, and added difficulties to McDowell's attempt. On December 13, 1809, the day set for the operation, a crowd, threatening and dangerous, had collected before the door of his house. 'Death to the man who was about to butcher a woman!' was the sentiment openly spoken by the men who constituted the mob. 'Are the Indians about, that I see this crowd of men collected?' asked the sheriff of the county, as he made his way into the throng. 'No,' cried many voices, 'it is worse than that; a man is about to butcher a woman in the house here!' Certain death awaited the doctor if the operation failed, and perhaps death even before the experiment was tried. Before performing this first ovarian operation Dr. McDowell offered a short prayer, and then, with the fear of failure and the direful

threats of the crowd without sounding in his ear, he began with his knife upon the perfectly conscious woman.

"'Let us hang the man!' cried the excited populace. 'You cannot do that,' said the sheriff. 'If she lives there will be no harm done, but, if she dies—then I have nothing further to say.' So the crowd was held in check awaiting the result.

"In the face of these facts Dr. McDowell performed the operation, and Mrs. Crawford lived. When the abdomen was opened the bowels were forced violently out by the weight of the tumor and were caught by the doctor's assistants. So horrible was the sight that a colored woman, who had climbed a pair of steps to look in at the window, fainted and fell to the ground. A tumor weighing sixty-two pounds was removed, and in five weeks Mrs. Crawford returned to her home a well woman. She lived thirty-two years afterward—probably as long as she would have lived had she never had the tumor.

"So crude were the instruments used as compared with those of the present day, that medical men of our own time say that Dr. McDowell performed the first ovarian operation with a knife and a corkscrew.

"The success of his first operation did not give Dr. McDowell confidence to make his great discovery public; and it was not until he had performed successfully two other ovariotomies that he was induced, seven years after Mrs. Crawford's life had been saved, to give to the world the result of his labors. A sensation resulted. McDowell, the benefactor, was hooted at and laughed to scorn. He was called the 'woman butcher,' 'a liar,' and villified in every way; medical journals even going so far as to denounce the doctor as an 'impostor,' and flatly asserting that the operation had never been done. None were more bitter against him than the members of the medical profession, who shunned Dr. McDowell as a leper. Afterward, however, the journals apologized, and the grand discovery was acknowledged."

It is estimated, and not unfairly, that the operation of ovariotomy in the last forty years has saved the lives of 81,000 women, adding ten years to each, making the addition of 810,000 years, and this is but the beginning.

The labor of preparing this book was undertaken at the *special request* of many eminent members of the medical profession (*to whom the book is dedicated*), as a memorial of Dr. McDowell. Mrs. Ridenbaugh therefore relies on the profession to reimburse her outlay by subscribing for the work, which is receiving the highest encomiums of physicians every where.

The work is not only a biography but also contains valuable scientific treatises and articles relating to ovariotomy. Every American physician should adorn his library with a copy, not only on account of the intrinsic value of the work, which is well worth the price, but as a matter of national pride. The book is illustrated by a fine steel engraving of Dr. McDowell, and by three other plates, representing his first operation in ovariotomy, his residence in which the operation was done, and the monument in Danville, Ky., erected to his memory by the Kentucky State Medical Society.

The profession is to be congratulated that due honor has been paid to McDowell, and that his claims—now recognized everywhere—have been recorded in permanent shape. No physician in the United States, and especially in the South, should be without this book. T. J. C.

THE uncertain strength of Coca leaves make this drug very unreliable, unless a preparation is used which we know to be made from a good leaf. Robinson's Wine Coca is prepared by percolating assayed Coca Leaves with Malaga Wine, and has always been found entirely satisfactory.

For nervous palpitation, Gingot recommends cold applications in various forms over the præcordia, viz.: In the morning on rising sponge the præcordia with cold water; on retiring place a compress wetted with cold water over the heart and cover with a dry cloth; this is to be removed as soon as it becomes warm. An ether spray also answers the purpose admirably. Palpitation depending on organic disease of the heart is also greatly benefited by it.—*Ther. Monatshefte.*

DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

EDITED BY
JAMES L. MINOR, M. D.
Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

EXTENSIVE LACERATION OF THE EYE WITH RECOVERY.

BY CHARLES H. MERZ, A.M., M.D., SANDUSKY, O.

The following case is thought worthy of record because of the somewhat unusual character of the injury and subsequent recovery.

On Thursday, May 18, 1890, J. M., æt. 16 years, was brought to my office two hours or more after the right eye had been struck by the steel tine of a pitchfork. While unloading hay, a fork slipped from the top of the load and falling, in some manner, struck the upturned face in an oblique direction. The fork entered the outer margin of the lower eyelid, piercing the sclerotic. The injury was followed by free hemorrhage, which was controlled by a cotton handkerchief bound over the eye, and the patient was brought eight miles over hot, dusty roads to my office.

Upon examination the eye showed a lacerated wound of the lower lid near the outer commissure, and a wound of like character of the entire lower half of the cornea at its junction with the sclerotic.

The cornea was partly collapsed from the escape of fluid, but the remnant of the anterior chamber was filled with blood; the iris had been torn, and the lower portion was protruding. The entire globe and lid were intensely congested, and there was still a slight hemorrhage.

The patient complained of severe pain in the eye and surrounding parts.

After carefully washing the eye with a stream of bichoride, 1.5000, an attempt was made to replace the lacerated iris, but this being found impossible, it was gently withdrawn, and the free portion cut off. There was some doubt as to the use of eserine or atropine, but the latter was employed 4 gr. to 1℥. The margins of the corneal wound were apposed as carefully as possible, and pledgets of lint, wet in ice water, applied continuously.

After the lapse of 24 hours the eye was found still badly congested and the patient was suffering much pain.

Six leeches were at once applied, and the following solution dropped in the eye every four to six hours: ℞ Hydrastiæ sulph., gr. jss; acidi boracici, gr. iv.; tr. opii deod., *m*xl.; cocaine hydrochlor., gr. ij; aquæ, ℥j. These measures had the effect of lessening the pain somewhat, but the congestion was still very marked. The free use of magnesiæ sulphate with mercurial inunctions and occasional leeching brought about a lessening of the congestion and kept the patient comfortable. The room was kept darkened and the ice water compresses continued at intervals for three weeks. Hot water was tried, but was not so comfortable as cold.

At the end of the third week photophobia and lachrymation had almost disappeared, and no pain was complained of.

The hemorrhagic clot in the anterior chamber gradually changed color, fading to a light yellow. At the end of six weeks there was perception of light, but no more.

Some conjunctival redness remained, but the patient was able to perform light manual labor by protecting the eye with dark smoked glasses.

Under the use of iodide of potassium the clot has been gradually absorbed, and vision is returning.

In this connection I would urge from personal observation in a number of cases that the enucleation of an injured eye be delayed more frequently than it is. Sympathetic inflammation is not so often the result of an injury as it is believed to be. At all events, the removal should be deferred for a length of time sufficient to prove the possibility or impossibility of saving the eye.—*Am. Jour. Oph.*, Sept., 1890.

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EDITORIAL CORPS.

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Original articles and clinical reports solicited. Contributors are notified that all matter forwarded us, is received with the distinct understanding that said matter has never appeared in print, and will not be allowed to appear in any other journal prior to its publication in this. All such matter should be sent directly to the editor to whose department it pertains.

Secretaries of medical and surgical societies will favor us by sending dates of regular meetings, with brief programme of important subjects coming before the meeting.

All matter must be in our hands on the tenth of the month preceding its publication.

The JOURNAL will be issued on the fifth of each month.

All communications other than provided for above, should be addressed to

JAS. L. MINOR, M.D., Editor,
Memphis, Tenn.

WM. KRAUSS, M.D., Business Manager.

THE ANNUAL MEETING OF THE TRI-STATE MEDICAL ASSOCIATION of Arkansas, Mississippi and Tennessee, will be held in Memphis, Tenn., Nov. 19th and 20th, at the Gayoso Hotel. All regular physicians in good standing are invited to attend.

Officers: President—John Y. Murray, M.D.; Vice-Presidents—P. W. Rowland, M.D., E. L. Tunstall, M.D., E. K. Leake, M.D.; Secretary—Shep. A. Rogers, M.D.; Assistant Secretary—R. M. Pate, M.D.

Committee of Arrangements: T. J. Crawford, M.D., Chairman; R. M. Pate, M.D., E. A. Neely, M.D., J. B. Sawyers, M.D., E. M. Willett, M.D.

The following is the order of business:

FIRST SESSION.

WEDNESDAY, Nov. 19, 10 A.M.

Call to order.
Prayer by Rev. H. A. Jones.
Address of Welcome.
Report of Committee of Arrangements.
Reception of Members by Invitation.
Election of Permanent Members.
Reading of Notes from Absentees.
Address by President Jno. Y. Murray, M.D.

Reception of Reports from Special Committees.

Voluntary contributions and their reference to appropriate Committees.

SECOND SESSION.

WEDNESDAY, Nov. 19, 2 P.M.

Election of Officers.

Report of Committee on Surgery.

Report of Committee on Malarial Hæmaturia.

Sanitary Progress in Tennessee, J. Berrien Lindsley, Nashville, Tenn.

Subsidence of Enlarged Lymphatic Glands on Destruction of Post-Rhinal Growths, Jas. Cabel Minor, M.D., Hot Springs, Arkansas.

Trephining for Fracture of the Skull with report of case, by S. W. Sanford, M.D., Corinth, Miss.

Methyl Violet in Affections of Eye, by Flavel B. Tiffany, M.D., Kansas City, Mo.

A Few Points Concerning Malaria with Chemical and Microscopical Results in Malarial Hæmaturia, by Gus Evans, M.D., Aberdeen, Miss.

THIRD SESSION.

WEDNESDAY, Nov. 19, 7 P.M.

Pelvic and Abdominal Abscesses, by T. J. Crofford, M.D., Memphis, Tenn.

Treatment of Syphilis, by L. Sexton, M.D., Wesson, Miss.

Morbid Condition of the Nose and Naso-Pharynx, by Kennedy Jones, M.D., Memphis, Tenn.

Congestive Fever, by H. C. Dunavant, M.D., Osceola, Ark.

Report of Twenty-five Cases of Cataract Extraction, by James L. Minor, M.D., of Memphis, Tenn.

A Paper by R. B. Maury, M.D., Memphis, Tenn.

FOURTH SESSION.

THURSDAY, Nov. 20, 10 A.M.

Treatment of Septic Peritonitis, by W. E. Davis, M.D., Birmingham, Ala.

Granular Ophthalmia, by J. F. Hill, M.D., Memphis.

Malarial Hæmaturia, by J. P. Conners, M.D., Lake Cormorant, Miss.

Malarial Hæmaturia, by W. H. Nance, M.D., Guntown, Miss.

Malarial Hæmaturia, by W. D. Redus, M.D., Port Gibson, Miss.

A Paper, by A. R. Haywood, M.D., Memphis, Tenn.

FIFTH SESSION.

THURSDAY, Nov. 20, 2 P.M.

A Paper, by W. B. Rogers, M.D., Memphis, Tenn.

Ophthalmic Surgery, by T. E. Edwards, M.D., Memphis.

Comp. Comminuted Fracture from Gunshot Wound; Report of Case, G. B. Malone, M.D., Memphis.

Ligation of Deep Femoral Artery, by R. B. Nall, Memphis, Tenn.

Urine, Sugar Tests, by Wm. Krauss, M.D., Memphis, Tenn.

Puerperal Fever, by J. A. Batte, M.D., Memphis, Tenn.

A Paper, by S. B. Witherington, M.D., Memphis, Tenn.

SIXTH SESSION.

THURSDAY, Nov. 20, 7 P.M.

Litholapaxy, by R. B. Nall, M.D., Memphis, Tenn.

Rabies, Report of Case, by Shep. A. Rogers, M.D., Memphis, Tenn.

Phyctenular Ophthalmia, by A. G. Sinclair, M.D., Memphis, Tenn.

Caisson Disease, by Harry C. Rogers, M.D., Memphis, Tenn.

Hip Disease, Report of Cases with Remarks, by M. DePass, M.D., Memphis, Tenn.

A Paper, by J. D. Talbert, M.D., Memphis, Tenn.

A fare reduction has been obtained at the leading hotels in the city, also reduced rates on all railroads.

There will be ample time for reading voluntary contributions.

Each member is requested to invite all regular physicians in his vicinity.

PHARMACY LAWS.—Our friends, the druggists, in Tennessee, Mississippi and Arkansas, should join the van of progress, and labor for the enactment of laws which will protect them from ignorance and make knowledge a test of the fitness for the dispensation of drugs. Thirty-five States in the Union have laws more or less stringent bearing upon this subject, yet those named above have none.

THE TENTH ANNUAL SESSION of the Memphis Hospital Medical College opened Monday, October 27th, with 120 students. This year will show a still further increase in attendance. Each year has been a success over the previous one, and ere long the roll of attendants here will exceed that of any Southern college. The care taken by the Faculty in the clinical instruction, together with abundance of material both surgical and medical, is what captivates the student as well as prepares him for service at the bedside. The opening address on Medical Education was by Prof. R. B. Maury.

WE welcome to our exchange list *The Journal of the State Medical Society of Arkansas.* It is published in Little Rock under the supervision of a Board of Trustees, with Dr. Lorenzo P. Gibson as managing editor. The *Journal* presents an attractive appearance; its general arrangement is good; the quality of its articles is excellent, and we predict for it a successful career.

MEDICAL CHARITIES IN NEW YORK.—The total number of charity patients treated in New York City during the year ending with 1889 was 450,000. It is estimated that one out of every three or four receives free medical advice and treatment.

NEW YORK TO THE FRONT.—A law recently passed in the State of New York requires preliminary examination of all persons designing the study of medicine.

WE are in receipt of the following:

WASHINGTON, D. C., October 27, 1890.

DEAR SIR—I am requested by the Hon. Secretaries of the Committee of Organization of the Seventh International Congress of Hygiene and Demography to call attention to the fact that this Congress will be held in London during the week beginning August 10, 1891.

The governments of all countries and municipalities and all public health authorities, universities, colleges and societies occupied in the study of the sciences more or less imme-

diately connected with Hygiene, are invited to co-operate and appoint delegates to represent them at the Congress. The Prince of Wales will preside.

A Committee of Organization has been formed, of which Sir Douglas Galton is chairman and Prof. W. H. Corfield and Mr. Shirley F. Murphy are honorary secretaries. An exhibition of articles of hygienic interest will be held in connection with the Congress. The last of these Congresses was held in Vienna in 1887 and was attended by over two thousand persons, and it is expected that the London meeting will be one of great magnitude and importance.

Very respectfully, JOHN S. BILLINGS, M.D.
Member of the International Permanent Committee.

BOOK REVIEWS.

THE ESSENTIALS OF MEDICAL CHEMISTRY. By Sam E. Woody, A.M., M.D. Third Edition. P. Blakiston, Son & Co.

If compends must be used, and it seems they must, the form giving condensed statements of facts is to be preferred. The popular question-and-answer form so much used is of value only where graduates are turned out by the "machine process," a plan very much to be condemned. The student who has to learn both the question and answer "by heart" should be discouraged from studying a profession in which judgment is the prime desideratum.

"The Essentials of Medical Chemistry" comes nearer the ideal compend than anything we have ever examined. The author has the rare faculty of getting at the pith of the subject in very few plain English words. The illustrations are all good, some original, those of urinary deposits especially clear. Woody's "Essentials of Medical Chemistry" contains more information in less words than any compend ever published. We should have liked to see the new nomenclature in a publication as late as this. W. K.

THE REVIEW OF INSANITY AND NERVOUS DISEASES. A quarterly Compendium of the current Literature of Neurology and Psychiatry. Edited by Dr. James H. McBride of Milwaukee, Wis., and a corps of five Associate Editors. Price, $2.00 per year.

The initial number of the Review has been received and read with much interest—and there is a deal of interesting and instructive matter in it. The editor assures us of its permanency, and we assure him that it will be necessary only for him to maintain the standard which has already been assumed, to make it one of the best journals in the country.

THE

Memphis Journal of the Medical Sciences.

MEMPHIS, TENN., DECEMBER, 1890.

DEPARTMENT OF

PRACTICE OF MEDICINE & THERAPEUTICS.

EDITED BY

B. G. HENNING, M. D.
S. A. ROGERS, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

MALARIAL FEVER IN ROME IN THE SUMMER AND FALL MONTHS.

REVIEW BY WM. KRAUSS, M.D.

Marchiafava and Celli, so well known in connection with the malarial hematozoon, have issued a paper on the progress of their extensive investigations of this organism. H. Weyl, *Berl. Klin. W.*, 1890, *No.* 41, gives the paper in extenso with cuts showing the cycles of evolution, and additions from supplementary notes of the authors.

According to them it has been proved that malarial infection is caused by a specific parasite, which, migrating into the red blood corpuscles, lives in and subsists upon them, develops further, converts hemoglobin into melanin, and multiplies by fission.

Golgi found that in malarias of Pavia a correlation existed between the fever curve and the phases of parasitical evolution. He also found that the parasites of different forms differed with the form of the disease.

M. and C. find the "small ameboid" forms almost exclusively in the summer and fall varieties, which have a rather pernicious tendency, while the more cyclical vernal malarias never become pernicious, recover without quinine, and always with it; in these the "small plasmodia" are always found. A few hours before an attack such alterations take place in them, that the onset may be predicted with certainty. "*If pigmented plasmodia are found, a paroxysm will certainly take place within a few hours.*" These undergo cyclical changes rather slowly, and hence the tertian and quartan ague. The parasites of the malarias of the late season go through their cycles in a very short time, and sporules may form *without pigmentation;* here we have the quotidian, double quotidian and continued varieties.

Laveran's "semilunar" parasites are a peculiar developmental stage of the plasmodia, which, according to Celli and Guarneri, are capable of undergoing two different kinds of changes, viz.: into "ameboid" and "semilunar" forms.

Whilst Laveran has seen the half-moon shaped bodies in all forms of malaria, M. and C. find them rarely in the summer, and most abundant in the pernicious and cachectic forms, especially in cases that had not yet taken quinine, though perniciosa have been observed in which the sickle form was absent. They consider this a later developmental stage of the ameboid.

All the observations show that in cases characterized by a tendency to become pernicious, "small ameboid" parasites are found in the red disks; they have either a short cycle, and are then full of pigment, or a long one, in which case they are pigmented and larger. These "large pigmented" ones are different from the "small pigmented" ones of vernal malaria.

Different seasons, localities and forms of malaria have correspondingly different parasites.

It would thus seem that the different views and findings on this subject have at last been satisfactorily explained and compromised.

It now remains for some investigator in the Mississippi Valley to describe the forms and phases found here. Young man, get out your microscope!

CROUPOUS PNEUMONIA IN THE PRACTICE OF THE POOR. — E. Gratzer, in *Therap. Monatshefte*, gives us some very good hints on this subject. He dwells on the difficulty of combating disease in the hovels of the poor, and the lack of appreciation of expectant treatment by this class, who gulp down nauseous mixtures with a smile of satisfaction, saying: "This ought to do good." He believes in energetic, impressive treatment. If the case is seen early, which does not often occur, he gives:

℞ Calomel, gr. xii.
Sugar, gr. xv. M.

Make three powders. S.—One three times a day.

This has a decided antipyretic effect, rendering quinine or antipyrin rarely necessary; in children never. He never gives antifebrin to children, but in pneumonia of adults it is his favorite for the first three or four days:

℞ Antifebrin, ℈ii.
Sugar, ʒi. M.

S.—One three times a day.

In addition, an expectorant from the beginning, which is usually:

℞ Decoct. senegæ, ʒij.
Ext. opium, gr. iss–iij.
Syr. marshmallow, ʒij. M.

Ipecac may be added in some cases. Tablespoonful every hour the first day, then every two hours. Ext. opium is superior to morphine; is never contraindicated except in drinkers and in children. Constipation may be corrected by enemas of soap and water. For children, opium is replaced by cherry laurel water, or, if patient is weak, liq. ammon. anisatus. If much collapsed, the following is of great service:

℞ Liq. ammon. anisat.
Spirits ether, aa ʒij. M.

S.—Five to ten drops every hour. This treatment is also indicated in older people with addition of some generous wine, diluted with water.

If calomel and antifebrin do not reduce the fever, the Priesnitz pack may be used. (Not much in favor in this country).

During convalescence, if appetite is not good, he uses:

℞ Acid muriatic, *m* xx.
Water, ℥iv.
Sweet spir. nitre, ℥i.
Syrup, q. s., ad. ℥v. M.

Adults, tablespoonful every two hours; children, one-half teaspoonful, in water.

The diet is milk; later, soup with perhaps an egg. Thirst is met by fragments of ice, or cold milk or water.

SYNOPSIS OF A PAPER ON URINE SUGAR TESTING.*

WM. KRAUSS, M.D., MEMPHIS, TENN.

The tests may be divided into five classes:

1. Fermentation.
2. Metallic reduction tests.
3. Color tests, mostly reductions.
4. Tests in which a definite sugar compound is formed.
5. Polarization.

1. *Fermentation.* The method of Roberts may be used; made by adding washed yeast to urine and keeping at about 98–100° F. for twenty-four hours. Loss of sp. gr. shows a fermentable substance, viz.: glucose.

Quantitative method of v. Jaksch is an improvement.

2. *Reductions.* Sugars have the well-known property of reducing alkaline solutions of certain heavy metals, viz.: Copper, bismuth, lead, silver, mercury, tin. Unfortunately for these beautiful, brilliant tests they only show the presence of some reducing agent. Copper tests are the most popular. The following method appears to give best qualitative results: Into each of three test tubes put ℥j of filtered, albumin-free urine; to the first add five, the second ten, and the third twenty drops of a five per cent. solution copper sulphate; shake and add enough caustic soda to redissolve the precipitate at first formed. Heat only those which yield clear solutions to boiling, when the brick-red precipitate must fall *immediately*. The object of this method is to avoid an excess of undissolved copper which obscures the test.

* Read before the Tri-State Medical Association, November 20, 1890.

A quantitative method is also given.

Of the other metallic tests in this connection, the bismuth test of Nylander only needs mention: Four gm. Rochelle salts are dissolved in 100 gm. eight per cent caustic soda solution, and as much subnitrate of bismuth added as it will dissolve. To ten parts urine add one part reagent and boil; a black precipitate indicates reduction. It is not very delicate, but a simple preliminary test. Rhubarb, albumin, sulphur, melanin, etc., vitiate it.

3. Color tests: Moore's potash test; Johnson's picric acid and potash test; Molisch's alpha-naphthol, and menthol-sulphuric acid tests; Penzoldt's diazobenzolsulpho test; Ehrlich's; Mulder's indigo-carmine test; Crismer's safranin test.

Of all these the last mentioned is open to the least objections. Curtman and others have found it reliable. The author has used it in normal and pathological urines of all kinds, and found it satisfactory. When a solution of a carbohydrate is boiled in alkaline solution with safranin, the red color is discharged. To use, make a 1:1000 solution of safranin in water. Add to 1 c.c. urine, 2 c.c. caustic soda, and 5 c. c. of the solution, and boil. If the color is not completely discharged, glucose is not present in "abnormal amount." Uric acid, kreatin, chloral, chloroform, hydrogen peroxide, etc., which reduce Fehling's solution, do not affect this test. A 0.1 per cent. sol. of glucose decolorizes it completely. It is to be recommended to the practitioner, because its results are decided, the method easy, and scarcely any precautions necessary. If no burette is at hand, a minim measure will answer. 20 *m* urine, 100 *m* solution and 40 *m* soda are a convenient quantity. *Do not shake, as the air will again color it.*

4. Tests, in which sugar forms a definite compound: Phenylhydrazin; lead. The lead test, as given by Tyson, is very good, but too complicated for the practitioner.

The phenylhydrazin test of Fischer depends on the formation of glucosephenylhydrazon in yellow needles, insoluble in cold water. Von Jaksch's method is given: Into a test tube containing 6–8 c.c. (ʒiss–ʒij) of urine, the point of a pen knife is taken twice full of hydrochlorate of phenylhydrazin and thrice full of sodium acetate, the whole warmed, and if

not completely dissolved, a little water added. The mixture is then placed in boiling water for 20–30 minutes, and then poured into a conical glass containing cold water, when a crystalline lemon-yellow precipitate will fall at once. If quantity is small allow it to settle and examine sediment under the microscope, where it will appear in long needles, partly arranged into rosettes. To ascertain whether the sugar is glucose, levulose, lactose or maltose, the melting point must be ascertained, which for glucose is 205° C. "I have used this test in all kinds of pathological urines, in diabetic urine (once), and in urines containing various proportions of added glucose. The more I use it the better I like it. The precipitate must be in lemon-yellow needles. 0.1 per cent. will give a definite reaction."

The paper concludes with the following precautions:

Urine should be filtered before even the sp. gr. is taken. It should be freed from albumin by boiling with acetic acid, and from excessive coloring matter by adding one-tenth volume of a ten per cent. sol. acetate of lead and filtering.

The best urinometers with correction for temperature give only approximate results. In differential density methods, a sp. gr. bottle and delicate balances should be used.

No one should attempt to examine a urine with a test he has not previously experimented with.

Quantitative tests should only be undertaken after the process has been found to work accurately.

Tests should always be corroborated by dissimilar ones, *i. e.*, tests of another group.

ACTION OF ALKALINE CHLORIDES ON CALOMEL.—As the theory of Mialhe, which affirms that calomel is decomposed by alkaline chlorides at the temperature of the body, although denied by many authors, is still taught in many chemical works, M. Adam has subjected the question, which of course is a most important one from a medical point of view, to a searching examination, and comes to the following conclusions: In contact with air at a high temperature calomel may be changed into the perchloride by the alkaline chlorides, more especially by ammonium chloride; but in

the absence of air, even in the presence of organic matter, this change is so slight as to be practically *nil*, and unless calomel is prescribed on an empty stomach it is of no consequence whether the food taken is salted or not. He also concludes that chloride of sodium is not incompatible with calomel.—*Lancet.*

Axtell (E. R.) on the Use of Bichloride of Mercury in Typhoid Fever.—In seventy cases of typhoid fever treated at our hospital last year, thirty-six were placed entirely upon the bichloride of mercury, one-twentieth of a grain three times a day in a half glass of water, and some stimulation in the form of whisky, in all cases with any marked prostration. This was faithfully followed out, and under its use we had in our thirty-six cases but two deaths, one of these being a case of advanced Hodgkin's disease, the other a case of melancholia with great fright, which patient we lost from profuse hemorrhage due to the fact that he could not be kept in bed.

The percentage is thus honestly reduced to almost *nil*, and I think it but fair to claim for the treatment, that under it the percentage of deaths is lessened, for in thirty-four cases on different treatment, nine died; and even if three of them be eliminated, as I have done before, still there is a large balance as against the thirty-six cases with no deaths. Under this treatment there is lessened mortality, shorter duration, less tympanites and furred tongue, fewer complications and more rapid convalescence.—*Denver Med. Times*, Aug., 1890.

Edwards (L. B.) on Salines in Peritonitis and Typho-Malarial Fever.—There had been hesitation and fear in regard to using the suggestion from lack of accuracy in differentiating typhoid and typho-malarial affections. He was confident that if his treatment could be adopted a decided inroad would be made in the direction of shortening the duration of typho-malarial fever. This idea was sustained by eminent authorities. He did not positively advocate this plan, but suggested it. Whereas a doctor would do well ordinarily to bring a case of typho-malarial fever to a close in fifteen to twenty days, he had completed two cases in about

eight days with the use of salines and such antipyretics as acetanilide, antipyrin and quinine. Fluid diet was as essential as medicines. In using the antipyretics he had guarded them with heart tonics, preferably strophanthus.—*N. Y. Med. Jour.*, July 19, 1890.

ABBOT (S. L.) ON CYSTITIS TREATED WITH SALOL.—The author narrates three cases of cystitis in women in which, all other treatment failing, salol finally cured. It was given, as a general thing, in gr. x. doses t. i. d., or gr. v. doses every three hours. Under its use the urine became acid and bad symptoms rapidly disappeared.—*Boston Med. and Surg. Jour.*, July 17, 1890.

THE UTILITY OF VACCINATION.—The deaths from small-pox in Germany, where there is compulsory vaccination, during the years 1887–1888, were 1.8 and 0.8 per million, respectively; while in Austria, where compulsion does not exist, the deaths were 583.7 and 540.4.—*Med. Record.*

TREATMENT OF SMALLPOX.—M. Galewouski of Paris reports that in the smallpox hospital at Bruun, in Austria, baths colored red with permanganate of potash are used for the treatment of smallpox. It is stated that after a short stay in the bath the temperature of the patient falls materially, his general health is improved, the pustules are resolved, and recovery sets in.—*Med. Press and Circular.*

MELANCHOLIA.—Dr. Wiltrout (*Northwestern Lancet*) calls attention to the fact that melancholia is often associated with a large amount of oxalate of calcium in the urine. He notes several cases of complete cure, or at least of great improvement, by the administration of nitro-muriatic acid, along with an occasional purgative.—*Brief.*

The attention of our readers is called to the advertisement of Messrs. R. A. Robinson & Co., which appears in this issue. This house is one of long standing and enjoys a reputation of the highest character. The preparations referred to we commend specially to the notice of practitioners.

DEPARTMENT OF

GENERAL SURGERY.

EDITED BY

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INJURIES TO THE PERONEUS LONGUS TENDON AND ITS SHEATH.

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Several times during the past few months patients have consulted me in regard to persistent lameness which had been diagnosed and treated as ankle sprain, the disability having followed a severe twist or injury to that joint.

The usual treatment—rest and anodyne lotions—was prescribed, and after a reasonable period the patients were advised to commence walking. In a short time the lameness came back and continued until rest was again enforced. On renewal of exercise, the same suffering again appeared. One of these patients was a young lady who had been under treatment for a year without obtaining relief.

In each instance no trouble was discovered in the ankle joint, but in all the disease was located in the sheath of the tendon of the peroneus longus muscle. This tendon, passing behind the external malleolus, enters a strong fibrous sheath, which conducts it along the side of the os calcis to a groove in the cuboid bone immediately behind the tuberosity of the fifth metatarsal bone, from whence it crosses the sole of the foot, covered in by the long calcaneo cuboid ligament, and is inserted into the base of the metatarsal bone of the great toe. In forcible adduction or twisting inward of the foot, this tendon is overstretched, the synovial membrane is injured, and lameness follows, the result of inflammation.

The recognition of the injury is easily made out, tenderness being experienced by pressure made along the course of the

tendon between the external malleolus and the base of the metatarsal bone of the little toe. Pain on forcible adduction of the foot will also be present, but little, if any, swelling. A differential diagnosis between this injury and sprain of the ankle is not a matter of difficulty. In sprain of the ankle, swelling is diffused about the joint, generally on the front of the articulation, while the swelling in injury of the tendon, if at all present, is located along the outer side of the foot between the external malleolus and the base of the metatarsal bone of the little toe. In injury of the tendon little inconvenience is experienced in flexion and extension of the foot, while such movements in cases of ankle sprain are attended by severe pain.

The treatment proper to the accident involving this tendon and its synovial investment, consists in fixation of the ankle with a Dupuytren splint applied along the outer part of the limb, by means of which the foot is secured in a state of adduction. This position relaxes the tendon and removes pressure from its canal.

Cold lotions, such as lead water and laudanum, may be applied for a short time. After eight or ten days the inflammatory trouble will have subsided, and the patient may be permitted to go about, but now comes the important part of the treatment. If allowed to walk with an ordinary shoe the trouble will certainly recur, as this tendon, being one of the supports of the foot, is not in a condition to endure its ordinary functional pressure. The sole of the shoe must be raised on the outside by a number of plies of leather, gradually thinned off toward the inner part so as to throw the weight of the body strongly on the inside of the foot, and thus relieve the tendon of all tension. In old cases of the injury a shoe so constructed must be worn for several months, and even then only restored to the usual form by gradually removing one ply of leather after another from the sole.—*Univ. Med. Mag.*

To Arrest Epistaxis.—Dr. W. W. Parker states, in the *Medical Record*, that the following simple substitute for Belloq's canula is not only effectual, but is easy of application and absolutely painless, and can be probed in the smallest

patients. The little device which he uses is made of fifteen of the long threads of patent lint, size, three and one-half or four inches long, which he doubles on themselves and ties in the middle, and lets one end of the string be six or eight inches long so as to pull the plug out when necessary. When doubled on itself it looks like a "comet" in miniature with a nucleus and thirty tails (or twice the number of threads used). A probe, or soft piece of pine but little bigger than a match, is pressed back upon the floor of the nasal cavity and pushed on till you reach the posterior nares. This will be known both by the resistance and the length of the probe, or the depth which you have reached. Then slowly withdraw the probe and plug the anterior nares, and you have arrested the bleeding. These twenty or thirty ends floating in the blood at once coagulate it. The passage of the soft lint gives no pain whatever. In persuading children to submit to the operation, he often passes the lint up his own nose to satisfy them it gives no pain. If lint is not at hand he uses the largest size spool cotton. The plug is removed in from twenty-four to forty-eight hours. It gives no pain and the patient is willing for it to remain. The other methods are all painful in execution, and the discomfort, while the plug remains, is very considerable.—*St. Louis Med. and Surg. Jour.*

THE TREATMENT OF CHANCROIDS.—Dr. G. Letzel of Munich, recommends the following treatment: The ulcer is painted daily for four days with undiluted liquor ferri chloridi. At the end of this time the sore will have become converted into a healthy granulating surface, and is then dusted for a few days with calomel, under which it cicatrizes rapidly. The pain attending the application is inconsiderable, and in only three cases was it found necessary to anæsthetize the part with five per cent. cocaine solution. Inflammatory reaction is absent or slight. Swellings of the glands were treated with compresses wet in a strong solution of liq. plumbi subacetatis (three tablespoonfuls to a quart of water), and usually disappeared within four days. The iron solution should be applied by the physician himself, the applications being made with cotton on a probe which is firmly pressed against the

surface of the sore for some time, and with which every portion is thoroughly brushed out.—*Medic. Chirurg. Rundschau. Int. Jour. Surg.*

MEATOTOMY—HOW TO PERFORM IT.*

DANIEL MORTON, M.D., ST. JOSEPH, MO.

"For who hath despised the day of small things."

I ask you to dismiss from your minds the consideration of ovariotomy, herniotomy, lithotomy and other like weighty matters, and for ten minutes to turn your attention to a paper of eight hundred words, bearing upon a simple procedure which must be done one hundred times oftener than any of the capital operations just mentioned.

I shall not speak of the indications which call for meatotomy but confine myself to the surgical procedure alone. It is the usual custom, without preparatory treatment, to stick a bistoury in the meatus and pull it out, enlarging the opening as the knife is withdrawn, regardless of the caliber of the urethra and a future hypospadias. This is slipshod, loose, inaccurate and unscientific.

The genito-urinary surgeon must contend, in all operations upon the urethra, with an acid and germ-laden fluid flowing over the freshly cut surfaces of his field of operation. One cannot remove the urine, but it can be sterilized and neutralized and thus to a certain degree rendered bland and unirritating. This is accomplished by the administration of the antiseptics boric acid or saccharine and the vegetable salts of potassium, the latter being eliminated by the kidneys as alkaline carbonates. My attention was first called to the use of boric acid in this connection three years ago by Palmer of Louisville, and since that time I have used it in the manner which he prescribes. By the use of these remedies the urine is rendered aseptic and the liability of the urethral fever is reduced to a minimum.

How is one to know to what extent to slit the meatus? Is it a mere matter of guess work? Nay! verily. It is a matter of measurement. That there is a relation between the

*Read before the Missouri Valley Medical Association, Council Bluffs, Iowa, September 9, 1890.

circumference of the penis and the caliber of the urethra has been established beyond peradventure. This is now acknowledged by all genito-urinary surgeons. Having this principle to guide us, it is a simple matter to make the calculation. Each inch of circumference of penis represents ten millimeters in circumference of caliber of urethra, and therefore if the penis be three and a half inches the caliber of the urethra for such a penis should be thirty-five millimeters and a thirty-five French sound should readily pass from meatus to bulb. Inject a few minims of a four per cent. solution of cocaine along the line of incision, having first constricted the penis with a bandage to prevent the rapid dissemination of the anæsthetic. With the knife, enlarge the opening to the required size, using as a guide to determine this point a bougie corresponding in millimeter to the normal caliber of the urethra. This should readily pass through the enlarged opening down to the bulb without obstruction. But, some one may say, the meatus is normally the narrowest portion of the canal, why do you cut it to full size? The answer is apparent on a moment's reflection. The contraction following the operation amounts to two or three millimeters, and thus the relation between meatus and urethra is re-established.

Unless the bougie *a boule* passes readily, the most important part of the operation has been a failure, since the band which is frequently found just within the meatus has been left untouched. Dr. J. C. Olmstead of Atlanta, Ga., a nephew of Otis, brings out this point admirably in an article published in the *Atlanta Medical and Surgical Journal*, entitled, "A Plea for the Meatus Urinarius." He says, "examination in such cases (unsuccessful operations) revealed the fact that the hypospadic slit that had been made had not reached the real source of the original troubles, namely, a tough little fibrous ring or stricture, from one-fourth to one-half an inch, sometimes an inch behind the meatus." This it was that required free and deep incision, the meatus itself calling for but comparatively slight incision. The indomitable "slitter" had cut down at times to, but not through, this, from the interior commissure of the meatus and had not gone further for the reason, I suppose that even he had to stop somewhere, and the meatus

was gaping inquiringly at him and ready apparently to swallow a "polished gas pipe."

After-treatment is very simple. The passage of a steel sound following cocainization every other day for a week will prevent adhesions. The urine should be continued in its neutralized and sterilized condition until recovery.

And now if you would know the conclusion of the whole matter, (1) neutralize and sterilize the urine before operating, (2) make the caliber of meatus and urethra correspond, (3) be sure to cut the post-meatal band.— *Weekly Med. Review.*

THE NECESSARY PEROXIDE OF HYDROGEN.

From a paper by Robert T. Morris, M.D., read before the Section of Surgery of the American Medical Association and published in the official journal of the Association:

For preventing suppuration we have bichloride of mercury, hydronaphthol, carbolic acid and many other antiseptics, but for stopping it abruptly and for sterilizing a suppurating wound we have only one antiseptic that is generally efficient so far as I know, and that is the strong peroxide of hydrogen. Therefore I have qualified it, not as "good," not as "useful," but as "necessary."

In abscess of the brain, where we could not thoroughly wash the pus out of tortuous canals without injuring the tissues, the H_2O_2, injected at a superficial point, will follow the pus, and throw it out, too, in a foaming mixture. It is best to inject a small quantity, wait until foaming ceases, and repeat injections until the last one fails to bubble. Then we know that the pus cavity is chemically clean, so far as live microbes are concerned.

In appendicitis, we can open the abscess, inject peroxide of hydrogen, and so thoroughly sterilize the pus cavity that we need not fear infection of the general peritoneal cavity if we wish to separate intestinal adhesions and remove the appendix vermiformis. Many a patient, who is now dead, could have been saved if peroxide of hydrogen had been thus used when he had appendicitis.

The single means at our disposal allows us to open the most extensive psoas abscess without dread of septic infection following.

It is possible to open a large abscess of the breast, wash it out with H_2O_2, and have recovery ensue under one antiseptic dressing, without the formation of another drop of pus.

Peroxide of hydrogen is an unstable compound, and becomes weaker as oxygen is given off, but Marchand's 15-volume solution will retain active germicidal powers for many months, if kept tightly corked in a cold place. The price of this manufacturer's preparation is about 75 cents per pound, and it can be obtained from any large drug house in this country. When using the H_2O_2 it should not be allowed to come into contact with metals if we wish to preserve its strength, as oxygen is then given off too rapidly.—*N. W. Lancet.*

AMPUTATION AT THE HIP-JOINT BY A BLOODLESS METHOD.

BY JOHN. A. WYETH, M.D.

The patient being placed in position, with the hip of the side to be operated on well over the corner of the table, the foot is elevated and an Esmarch bandage applied to drive the contained blood toward the heart. The bandage should not be tightly put on over the seat of the disease for fear of driving septic matter into the circulation. With the rubber bandage still in position, the needles are next introduced.

Two steel mattress-needles, three-sixteenths of an inch in diameter and a foot long, are used. The point of one is inserted an inch below the anterior superior spine of the ilium and slightly to the inner side of this prominence, and is made to traverse the muscles and deep fascia, passing about halfway between the great trochanter and the iliac spine, external to the neck of the femur, and through the substance of the tensor vaginæ femoris, coming out just back of the trochanter. About four inches of the needle should be concealed by the tissues.

The point of the second needle is entered an inch below the level of the crotch internally to the saphenous opening, and, passing through the adductors, comes out about an inch and

a half in front of the *tuber ischii*. No vessels are endangered by these needles. The points are protected by corks to prevent injury to the operator's hands.

A piece of strong white rubber tube, half an inch in diameter and long enough when tightened in position to go five or six times around the thigh, is now wound very tight around and above the fixation needles and tied.

The Esmarch bandage is removed and five inches below the tourniquet a circular incision is made, and a cuff, which includes the subcutaneous tissues down to the deep fascia, is dissected off to the level of the lesser trochanter, at which level the muscles and vessels are divided squarely and the bone sawed through. All vessels (including the veins) which can be seen are tied with catgut and the smaller bleeding points can be discovered by slightly loosening the tourniquet, which is then entirely removed.

The remaining portion of the femur is now easily enucleated by dividing the attached muscles close to the bone and opening the capsule as soon as it is reached. On lifting the end of the bone in the direction of the patient's naval and dividing the cotyloid ligament posteriorly, the air enters the cavity of the acetabulum and greatly facilitates the division of the ligamentum teres.

The closure of the wound with proper drainage, follows. The entire procedure requires the strict asepsis of modern surgery.

One other important point I wish to emphasize—viz., the advisability in certain cases of doing this operation in *two sittings*.

In one of my cases the patient was greatly exhausted, and after dividing the femur at the lesser trochanter and securing the vessels, fearing the supervention of shock, as indicated by the pulse, I closed the wound, which healed by first intention. At the first dressing (on the seventeenth day), the remaining portion of the bone was removed by an incision over the trochanter major. The recovery was uninterrupted.

I should prefer to complete the operation at one sitting, but cases will occur where the danger of shock may be obvi-

ated by stopping short of enucleation, leaving this for a week or two, when reaction and convalescence are assured.

In neither of my cases was there any bleeding, and, *in fact amputation at the hip-joint is now a bloodless operation.—Intern. Jour. Surg.*

DEPARTMENT OF

GYNECOLOGY.

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RECENT ABDOMINAL WORK.

Case I. Mrs. G., aged 35, was delivered at term; in two weeks or earlier fever set in which did not yield to quinine. Two weeks later I saw the case, and found a large but circumscribed swelling on the left side, too high to be felt at the vaginal vault. Diagnosed suppuration. A few days later an incision was made, a pint or more of pus was evacuated, and a drainage tube was put in. She entirely recovered, and is in all respects well.

Case II. I first saw Mrs. C., multipara, aged 27 years, on the 24th of last July. One month previously she had been delivered of a seven months dead child. Three days after labor fever set in which had continued up to the time I saw her. Associated with this fever there was a circumscribed swelling in the left side, accompanied by great pain. She was weak, and we prepared for an operation that afternoon. In the meantime she was carried to St. Joseph's Hospital and the operation was done there. We cautiously opened the abdomen over the swelling into the pus cavity, evacuated and put in a drainage tube. She uninterruptedly got well.

Case III. Mrs. P., a primipara, aged 24, had been a sufferer from pelvic inflammation and its results for several months, dating from the birth of her first and only child. This inflam-

mation had already resulted in suppuration, and the surgeon in attendance had made openings through the vaginal vault and abdominal parietes into the sac of pus which at different times had pointed at these sites. There was also an opening into the bladder from perforation by the pus. There had also been an opening made by the surgeon into the base of the bladder through the anterior vaginal wall. At this stage, on November 18, 1889, I, at the instigation of her physician, took charge of her case. Her pulse was 133, her temperature was 103°; there was delirium from uremic poisoning, incident to absorption of the urine in the abdomen. It was evident that the first thing to be done was to dilate the openings into the sac, and draw a tube through the abdominal incision and out through the opening in the vaginal vault. We were enabled to irrigate the abdomen or that portion taken up by the sac, and in a short while clear up the delirium, and materially improve the condition of the patient. After a treatment in this way for some weeks, the opening from the bladder into the abdomen was healed, and all the urine dribbled away through the hole in the base of the bladder. Before a great while this patient was sitting up, and in the course of a few months was going around, though far from being cured. The pains in the abdomen continued in their accustomed severity. An examination by the bimanual method showed that there were adhesions, a result of the inflammation through which she had passed. An exploratory incision was offered her with the idea that, if compatible with a reasonable safety, of removing the diseased appendages which had likely produced her trouble, and were still offending her. She accepted the proposition.

On May 23d, we opened the abdomen, but found intestines, uterus and appendages so matted together that we did not think it very likely that she would recover if this mass were broken up. The abdomen was washed out and closed. She was up again in three weeks; has since materially improved; visited her relatives in Canada, and is now attending to her household duties.

This case illustrates the value of the palliative expectant treatment, and the folly of abandoning treatment because you

are foiled in your efforts to accomplish what seems to be the proper thing. Should she suffer too greatly, we would advise the unraveling of this mass of intestines and removing the appendages, although the risk be great.

Case IV. Mrs. S., aged 35, of Arkansas, called me to see her in this city on January 15th last. The abdomen was enormously distended; the duration of the growth was only a few months; the tension and pressure were consequently very great. The womb was forced out at the vulval opening, and the general appearance told us that unless something be done, she would soon die. We took her into the Infirmary, notwithstanding we had closed for the summer. Prostration had gone so far that she fainted while taking her bath, preparatory to the operation. Her pulse was 120. We saw no way of relieving her other than by an operation, and this chance, in our opinion, was a slim one; it was a forlorn hope.

On the evening of the 17th, we opened the abdomen; before we got into the cavity, the colloid substance filled up our incision. We extended the incision and removed the contents by dipping and pulling as rapidly as possible. There were adhesions to the entire abdominal wall surrounding the tumor and to the intestines and omentum, so that it was a pretty good hour's work to separate and remove the tumor. The pulse sank rapidly; we stimulated by hot water irrigation, by whisky, strychnine and atropine hypodermically. She rallied partially, only to sink into a state of shock from which she died eight hours later.

Case V. Mrs. W., aged 23, came for treatment with an enlargement of the abdomen. Upon examination it presented many of the characteristics of an ovarian tumor, yet, it was impossible to determine its nature. She had come from a malarial district; on this account our attention was directed toward the spleen. We could not find it in its proper location, but the pressure from below, crowding the abdominal contents upward, might very readily have covered over the outside of this organ, preventing its detection by percussion and palpation. In the absence of a positive conviction as to the nature of the growth, and on account of the impossibility of

making a diagnosis, we advised an exploratory incision. This revealed an hypertrophied spleen. On account of the high mortality attending splenotomy, and believing it could be reduced, the organ was not removed. The peritoneal cavity was filled with a sanguinolent fluid, due to the introduction of an aspirator needle some days previously. This was carefully washed out, and the abdominal cavity closed. She recovered in due time from the operation.

We advised a removal of residence from the swamps, and the use of antimalarial tonics. Her physician on Nov. 15, writes me: "She is doing very well. Spleen considerably reduced under the influence of antimalarial tonics. She is now pregnant, having conceived very soon after returning from Infirmary, some six or seven months ago. I don't think her spleen gives her much if any inconvenience."

Case VI. Mrs. F., aged 24, came to me September 28th last. She was married one year ago. Her abdomen was quite large. The history was that one year ago an enlargement presented rather to the left of the median line and has grown rapidly. The diagnosis was ovarian tumor, and she was prepared for an operation, and on October 1st the usual incision was made. The tumor was adherent to the whole of the front of the abdomen. This was forcibly separated by the hand, the trocar plunged in, and the fluid drawn off. This left the solid portion, which was too large to be removed. The incision was extended to the ensiform cartilage, and the solid portion of the tumor, which weighed 18 pounds after being separated from its attachments, was lifted out, making with the fluid portion, 40 pounds in weight. There was quite a lot of pus in the bottom of the sac. Notwithstanding the pulse was more than 100 before the operation and 120 for several days thereafter, she made an uninterupted recovery. I was permitted to examine this case on last Saturday, and am gratified to report her in all respects well.

Case VII. Miss Lizzie B., aged 22 years, unmarried, has always been a healthy, robust girl, presented herself last July with an enlargement of the abdomen, which began low down to the left of the median line; diagnosis, ovarian tumor.

The weather being warm, the Infirmary being closed, and her health being entirely unaffected, advised her to postpone operative interference till September, unless there should arise some more urgent necessity than at present showed itself. She passed through the summer with no perceptible impairment of health although when she presented herself the 20th of last month (October) the abdomen was considerably larger than when examined in July. On October 22d, two days later, the abdomen was opened, and a 20 pound multilocular ovarian cyst was removed. The difficulties were, some adhesions, and a short pedicle, so broad as to be tied with difficulty after the slipping of several ligatures. There were a great number of small cysts, compelling us to extend the incision midway between the umbilicus and the ensiform cartilage. She made an uninterupted recovery, and went home on the 21st of November.

Case VIII. Mrs. D., aged 23, a Jewess of small stature, has been married three years—no child. Upon examination we diagnosed an ovarian tumor of small size, which was wedged in between the uterus and rectum. Each morning at the time of the evacuation of the bowels, and for several hours afterward, there was excruciating pain. She was very much reduced in flesh and was decidedly anæmic. The pulse was also high—above 90. Under the influence of local treatment, tonics and massage, we, in six weeks, had her much improved for the operation of removal of this tumor. On the 9th of this month, we opened the abdomen and found the tumor somewhat larger than we anticipated. Upon attempting its removal after loosening its adhesions, to our dismay it ruptured, liberating a pint or two of pus into the abdominal cavity among the intestines. Realizing the great danger from this unfortunate accident, which was not preventable owing to the thinness and rottenness of the walls of the tumor. We removed this pus by means of sponges and tied off the pedicle. We hastened to make the abdomen as clean as possible by repeated irrigations. We have had but few patients to progress better than this one has done. She returned to her home on December 5th in good condition, and no doubt is perfectly cured.

Number	Name	Age	Married or Single	Pathological Condition	Operation	Adhesions	Drainage	Where Operation was Done	Recovery or Death	Effect of Operation	REMARKS
1	Mrs. G.	35	Married.	Perimetric abscess following delivery.	Abdominal section and drainage. Sac not removed.	Yes.	Yes.	Residence.	Recovered	Permenently cured.	She was a strong woman, a multipara, and had experienced no difficulty after delivery prior to this. The cause likely infection.
2	Mrs. C.	27	Married.	Perimetric abscess following delivery.	Abdominal section and drainage. Sac not removed.	Yes.	Yes.	St. Joseph Hospital.	Recovered	Permanently cured.	Not strong, and had had a lump in side two years before after delivery, evidently a threatened abscess, possibly an encysted one.
3	Mrs. P.	24	Married.	Diseased appendages giving rise to peritonitis and abscess.	Abdominal section for abscess. Then again for removal of appendages.	Yes.	In first operation only.	Residence.	Recovered	Not fully cured, but able to do her household duties.	She had experienced great suffering for months before, as described in Case 3. The removal of appendages was not permitted unless thought to be compatible with safety.
4	Mrs. S.	35	Married.	Fifty pound ovarian tumor, with colloid contents.	Abdominal section and removal of fifty pound colloid tumor.	Yes.	Yes.	Private Sanitarium	Died.		There was no hope without operation, and but little with it. The case was desperate. Patient fainted away before operation. Pulse 120 per minute. The tumor weighed fifty pounds. Six months growth, and likely cancerous.

5	Mrs. W.	23	Married.	Enlarged spleen.	Abdominal section.	No.	No.	Private Sanitarium	Recovered	Patient virtually cured of enlarged spleen, and pregnnnt at this time.	Diagnosis impossible without laparatomy; the spleen not removed on account of high mortality of splenotomy and ability to effect a cure by removing to a non-malarial district.
6	Mrs. F.	24	Married.	Ovarian polycystic tumor.	Abdominal section and removal of forty pound tumor.	Yes.	No.	Private Sanitarium	Recovered	Permanently cured.	The difficulties were that 18 pounds of tumor were solid, so shaped and adhered that it was impossible to remove it without opening the abdomen from ensiform cartilage to the symphisis pubes. The tumor altogether weighed forty pounds.
7	Miss B.	22	Unmarried	Multilocular ovarian cyst.	Abdominal section and removal of twenty pound tumor.	Yes.	No.	Private Sanitarium	Recovered	Permanently cured.	Difficulties were: 1. A great number of small cysts, too numerous to drain, necessitating an extension of incision to midway between ensiform cartilage and umbilicus. 2. A short broad pedicle which predisposed to hemorrhage on account of difficulty in getting ligature to sufficiently compress it.
8	Mrs. S.	23	Married.	Suppurating ovarian cyst.	Abdominal section and removal of cyst.	Yes.	Yes.	Private Sanitarium	Recovered	Permanently cured.	The cyst ruptured and liberated two pints pus into abdominal cavity among intestines. Sponged out pus. Very thorough irrigation for 30 minutes, which not only did away with danger from infection, but the water being 120° diminished shock.

This eighth case is one in which there was great danger of rupture, which might have occurred at any moment. The cyst wall could be torn like wet paper, and might have given way on slight exertion, such as getting in or out of her carriage. It is impossible to estimate or appreciate such dangers as this lady was daily exposed to.

In this report I have sought not to burden the Society with methods, technique and details. This can be brought out in the discussion as the members may be disposed.

The greatest conservatism compatible with thoroughness has been observed.

In Cases 1, 2 and 3 simply the pus was evacuated; it would have been far from conservatism to have attempted a removal of the sac in their cases, whilst in Case 8 it would have been quite as unsurgical as dangerous to have left it to remain, although there were some adhesions.

In the first four cases neither ovary was removed. In the remaining four only one of these organs in each case was sacrificed.

Case No. 5 is now three or four months pregnant; Cases 6, 7 and 8 are young women—each has a healthy ovary left. I see no reason why they may not in future bear children. The necessity for the removal of the sound ovary is not required in ovariotomy, as some operators claim it is (though I doubt it) in oophorectomy.

The greatest simplicity in methods has been preserved; boiled water alone has been used for irrigation inside the abdomen.

A long needle invented by myself for putting in the stitches through both sides at once, has been used. I am satisfied that in closing a long incision, 10, 20, or 30 minutes can be saved. Time, at this junction, is very valuable in obviating, as far as possible, the oncoming shock. The needle is pushed through from the side next the operator; then with the aid of the assistant, the opposite side. A suture is placed in the slot; it is then quickly withdrawn, bringing with it the suture. All the sutures in rapid succession are introduced in this way.

With the exception of the spray, the most thorough antisepsis outside, and asepsis inside of the abdomen, has been

observed. It is perhaps worth stating that antisepsis, with us, is only valuable as it conduces to asepsis. I believe in the use of the spray before the operation, not that the carbolic acid in it is of value in killing germs, not that it is so important to kill the germs; not this at all—but I do believe by increasing the humidity of the atmosphere, it will cause the organic matter floating in the room to settle down, and there is consequently less likelihood of it being deposited in the open wound.

It is gratifying to me to relate the fact that I have never had a case of peritonitis to follow an abdominal operation, nor has a ventral hernia ever ensued.

DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

EDITED BY

JAMES L. MINOR, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

REMOVAL OF A PIECE OF KNIFE-BLADE

ONE AND A QUARTER INCHES LONG BY ONE-HALF INCH IN WIDTH, WHICH HAD BEEN IMBEDDED IN THE TISSUE ABOUT THE EAR FOR NEARLY TWO YEARS AND A HALF.*

BY JAMES L. MINOR, M.D.

Mr. N. consulted me on the 10th of Feb., 1890, for trouble with his ear. He complained of frequent attacks of pain in the left side of his head which radiated from the ear of that side, and of almost constant pain in the ear. No tender spots had been noticed, but laying on the left side intensified the pain about the head and ear. The hearing was slightly impaired, and noises in the ear were constant and annoying. These symptoms had existed for about six months, and were attributed to no special cause. A glance into the ear showed

* Read before the Tri-State Medical Association of Arkansas, Mississippi and Tennessee, Nov. 21, 1890.

that the canal was blocked with wax, and, supposing I had a case of hardened and impacted wax to deal with, I proceeded to remove it with a syringe. After removing a small plug, the ear was examined again, and I was surprised to see, at a distance of half an inch from the external orifice of the ear, a solid black substance, with a smooth somewhat polished surface, completely blocking the canal. I at once suspected the presence of a foreign substance—probably a bead, a button or something of the kind, but the patient stoutly denied that anything of the sort had ever gotten into the ear. A careful examination, however, convinced me that what I saw was the exposed portion of a piece of metal, the remainder of which was firmly imbedded in the adjacent tissue. I assured the patient of this, but he still maintained that it was impossible, for he was certain that nothing had ever gained access to the ear. Recalling a case in which I had found a bullet in the same locality, which had come from a pistol shot in the face, I inquired if he had ever been shot or wounded about the face or head. He had not been shot, but nearly two years and a half before (Nov., 1887) received a large and deep cut on the temple, which was obstinate in healing. The scar, still visible, is two inches in front of the ear, and extends in a vertical direction, from a point one inch and a half above the zygoma, to a point an equal distance below it. The blade of the knife with which the stabbing was done, had evidently broken off and remained without its presence being suspected. The delay in the healing of the wound was probably due to its presence. No other effects were produced, however, for a period of nearly two years, when the pain, diminished hearing, and tinnitus, caused him to seek relief for ear trouble.

On Feb. 11, with the assistance of Dr. Williford, the patient was etherized, and an incision one inch long and extending to the bone, was made, half an inch behind and parallel to the ear. Then with a strong pair of forceps, the sharp end of the blade, which was bent as you will observe, was grasped and readily withdrawn. The hemorrhage was slight and soon ceased; the edges of the wound came well into position, and required no sutures. The parts were freely dusted with pul-

verized boric acid, and a light absorbent cotton dressing was applied and retained by a loose bandage. Little or no pain was experienced in the healing process, and on Feb. 17, when he reported, the wounds had healed, and, so far as I could see, without the formation of a drop of pus. He was entirely relieved of all trouble, and has so remained up to the present time.

DEUTSCHMANN (HAMBURG) ARTHRITIS BLENORRHOICA.—*Arch. f. Ophthal. XXXVI.* 1. *p.* 109.—The author records two cases as follows: 1. A child æt. three weeks brought to him with severe blenorrhea neonatorum, for which no treatment had been adopted. The conjunctival affection was typical, and under the use of nitrate of silver behaved in the usual way. Twelve days later a right-sided otitis media developed, attributed by the mother to pus entering the external ear from the conjunctiva. Simultaneously, or very soon afterward, severe swelling of the right wrist and left ankle joint appeared. Deutschmann proposed to puncture the affected joint in order to examine the secretion, but the child did not come to him again, and died soon after with cerebral symptoms, probably due to extension of disease from the ear.

2. A three weeks old child, with blenorrhea neonatorum, which had received no treatment. A few days before the child was brought to the hospital, redness and swelling of the left knee-joint had come on. In other respects the child was healthy. Microscopic examination of the conjunctival secretion revealed numerous gonococci, mostly in the cells. The patient was the ninth child, and the eight previous children had all suffered from blenorrhea neonatorum. A small quantity of secretion from the urethra of the mother was examined, but no gonococci discovered, and no evidence of gonococci could be found in the urine of the father.

The knee-joint of the child was punctured with a Pravaz' syringe, and a small quantity of purulent fluid removed; this was found on examination to contain large numbers of gonococci, corresponding closely in all particulars to the description of the microbe given by Neisser. The similarity, in clinical aspects, between these cases of joint affection, follow-

ing blenorrhea neonatorum, and that which occurs in the course of gonorrhea is manifest, and strongly indicative of the pathogenetic identity of the two inflammations.

The previous records of arthritic inflammation in cases of purulent ophthalmia are not very numerous, and may be here briefly noticed; for the references to them, we must refer readers to Deutschmann's paper. Poncet and Galezowski in 1875 recorded cases of gonorrheal rheumatism, in patients inoculated with urethral pus for the cure of severe pannus; this was before the discovery of the gonococcus. Debierre, ten years later, published a case of conjunctival blenorrhea, in which fourteen days after infection, inflammation of the left elbow joint appeared; this patient was a child, who had been accidentally inoculated from a newborn child. Lucas and Fendick, in the same year, each reported cases of swelling of joints during ophthalmia neonatorum. Zatvorincki also, in 1885, recorded inflammation of elbow and wrist joints in a newly born child with purulent ophthalmia; the mother of the child, three days after her confinement, was attacked by severe para-metritis, and the affection in both patients was considered of microbic origin. Lastly, Wiadmark published a case of purulent conjunctivitis in a child (? newly born); the secretion from the conjunctiva contained gonococci; sixteen days after the commencement of the ophthalmia the right ankle joint became acutely inflamed.

In none of the foregoing cases is there mention of examination of the exudation in the inflamed joints. In all in which any statement upon the point is made, the third week is given as the time at which the joint affection appeared. This corresponds closely with Deutschmann's cases. In both his patients it is perhaps noteworthy that the conjunctival affection had existed for some time without treatment; he also notes that the secretion was profuse and was uninfluenced by the onset of the arthritis. In his second case complete recovery ensued.

The author has on several occasions removed portions of the conjunctiva in cases of blenorrhea neonatorum, as he did in the two reported cases; microscopic examination of the piece excised showed the gonococci in and between the epi-

thelial cells, and in the sub-epithelial tissue, enclosed in the pus cells, and adjoining the loops of delicate vessels in this tissue. It seems probable that here the microbes find their way into the blood and lymph channels and are carried thence to distant parts of the body.—*Oph. Rev., Nov.*, 1890.

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Secretaries of medical and surgical societies will favor us by sending dates of regular meetings, with brief programme of important subjects coming before the meeting.

All matter must be in our hands on the tenth of the month preceding its publication.

The JOURNAL will be issued on the fifth of each month.

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JAS. L. MINOR, M.D., Editor,
WM. KRAUSS, M.D., Business Manager. Memphis, Tenn.

KOCH'S CURE OF CONSUMPTION.—After years of patient toil and scientific work, Koch presented to the medical profession in 1882 his discovery of the *tubercle bacillus*—the germ of consumption. This discovery marked an era in the study of that dread disease but little less important than the more recent one of its cure, which now agitates the civilized world, for the one was the logical outcome of the other. Most physicians were slow to accept his claims, and many denied their accuracy altogether, but time and experience proved that Koch was right, and today his discovery of the germ of consumption is a fact so well established that to doubt it is but an evidence of ignorance. Having learned the cause of tuberculosis, the next step was to discover its cure. And Koch, with the same patience and zeal, the same laborious effort and scientific work which led to the discovery of the

tubercle bacillus, began the search for some means by which this germ could be destroyed or devitalized. This much has been said to show the character of the man and his work, and the value which should be attached to his claims. He has recently announced the discovery of a method of treatment—injection of attenuated virus(?)—which will cure tuberculosis. This discovery is second to none ever made, and may well excite the enthusiasm of the world, for, not alone will it enable the physician to combat the most formidable disease known to mankind, but it will be a stepping-stone in the pathology and treatment of most diseases to which he is heir. We cannot wonder at the sensational reports which have filled columns in our newspapers; but we must remember that our information comes from such sources, and that it will be well to await Koch's personal reports and claims before positive conclusions are formed.

THE TRI-STATE MEDICAL ASSOCIATION OF ARKANSAS, MISSISSIPPI AND TENNESSEE.—The recent meeting of this association was the best in point of attendance and character of work that has been held. The attendance was not limited to those in our immediate vicinity, for there was a fair sprinkling of physicians from distant points, which shows a growing appreciation of the importance of these meetings. The articles presented evidenced bestowal of intelligent study and thought, and the discussions which ensued proved that they had fallen in fertile soil. Hematuria and the continued fevers belonging to this locality very properly received a deal of attention; but the variety of subjects which came up showed the keen interest had in every nook and corner of medicine. The conspicuous absence of politics in this meeting added greatly to the pleasure of its sessions, and materially facilitated its work. The officers for the ensuing year are as follows: President, Dr. Dunavant, of Osceola, Ark.; Vice-Presidents, Drs. Barton, Weisinger and Sandford; Secretary, Dr. Elkan; Assistant-Secretary, Dr. Pate; Treasurer, Dr. Krauss.

ADENOID VEGETATIONS OF THE NASO-PHARYNX.—A very convenient and efficacious method of removing these growths is with the finger, using the finger-nail as a scraper, just as Capart uses his cutting-spoon for the same purpose. Guye, of Amsterdam, described and advocated this method of operating at the International Medical Congress in London (1881), and since that time it has found favor in hands of many practitioners. It is a simple procedure, has much to recommend it, and no physician should be ignorant of it.

The Eye, Ear, Nose and Throat Free Hospital, of New Orleans, will appoint two resident surgeons early in January. For further information apply or write to the secretary, Mr. Jos. A. Hincksy.

BOOK REVIEWS.

LATIN GRAMMAR OF PHARMACY AND MEDICINE. By D. H. Robinson, PH.D., and L. E. Sayre, PH.G. P. Blakiston, Son & Co., Philadelphia, Pa.

As an outcome of their experience as teachers of Latin and Pharmacy, respectively, in the University of Kansas, the authors have published this work with a view of giving a grammar which would impart not only the groundwork of Latin, but the practical bearings of that language to the student of pharmacy or medicine as well. The work has been well done, and it would be well for every student of medicine and of pharmacy to possess the book and master its contents.

PHYSICIANS' VISITING LIST FOR 1891. P. Blakiston, Son & Co., Philadelphia, Pa.

For compactness, completeness, convenience and durability this Visiting List surpasses all others.

PROGRESSIVE EXERCISES IN PRACTICAL CHEMISTRY. Leffmann & Blarn. Blakiston, Son & Co., Philadelphia, Pa.

A manual including the methods of laboratory instruction in inorganic chemistry in use at the Woman's Medical College and the Pennsylvania College of Dentistry.

We welcome the *Pharmaceutische Rundschau* to our exchange table. No pharmacist or physician who reads German should be without it. It is the best publication in any language.

Note the ad. of N. Y. Polyclinic. It is the best established post-graduate school in America.

The ad. of S. E. Ridgely should be thought of as the holidays approach. Mr. Ridgely imports only the best goods for gentlemen.

If you want to know all about chloralamid, write Lehn & Fink for their pamphlet. This house is always ahead in importations of rare and new chemicals.

Mr. J. N. Mulford's holiday stock of jewelry is as complete as any in the South. He also makes a specialty of optical goods. See advertisement.

A careful review of our advertising pages will be of profit to our readers.

The profession's attention is called to the ad. of Van Vleet & Co. They keep the best stock of drugs, sundries, and physicians' specialties. Write for catalogue.

Mortality Statistics of Memphis.—The rate per 1000 annually, from all causes, and special causes which are usually preventable, for month ending November 30, 1890.

Deaths under 5 years	Consumption	Lung Diseases. Acute	Diphtheria and Croup	Typhoid Fever	Malarial Fever	Scarlet Fever	Measles	Puerperal Diseases	Whooping-cough	Accident	Deaths, White	Deaths, Colored	Total Deaths
28	10	9	2	3	7	—	—	—	—	10	39	50	89

Population, 62,000. Total annual rate per 1000, 17.22; Residents, 13.93.

THE

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MEMPHIS, TENN., JANUARY, 1891.

DEPARTMENT OF

PRACTICE OF MEDICINE AND THERAPEUTICS.

CONDUCTED BY

B. G. HENNING, M. D.

S. A. ROGERS, M. D.

Memphis, Tenn.

To whom all matter pertaining to this Department should be addressed.

SUBSIDENCE OF ENLARGED CERVICAL GLANDS ON THE DESTRUCTION OF POST-RHINAL GROWTHS.

JAS. CABELL MINOR, HOT SPRINGS, ARK.

The patient, a Kentuckian from malarial district, age 35 years, a "mouth-breather," jaundiced, with gloomy cast of features, hearing in both ears limited to contact. Cervical glands on both sides greatly enlarged; so much to his annoyance that he had made arrangements with another surgeon to have same removed after his recovery from the trouble in question. No specific history.

The forefinger rendered aseptic was used for diagnosis, and upon being passed along the posterior wall came immediately in contact with a large, soft and spongy mass occluding both nostrils and filling the entire vault of the pharynx. The mass was at once broken up with the finger as a curette, and the cavity

rid of the obstruction without further deliberation or the use of an anesthetic. The aggregate weight of the mass removed was about three ounces.

The curette was used a few hours later on account of remaining patulous fragments giving rise to hemorrhage.

The hearing began to improve at once. Breathing through the nose became easy, and upon his return two weeks later, it was an unexpected pleasure to note the almost complete subsidence of the cervical hypertrophy.

The writer presumes there is nothing remarkable in the disappearance of the enlargement, owing to the intimate relation existing between glandular structures. The fact that upon the removal of the annoying mass in the pharynx, the patient's comfort was added to greatly, and his spirits were rallied in proportion, are two sufficient causes for his improvement in general health; and as soon as such convalescence was established, glandular absorption was more readily promoted.

The case should prove of interest as demonstrating the fact that enlarged cervical glands (and indeed other complications in throat and lungs) can be sometimes dependent on a diseased condition of the glandular ring in the post-rhinal region, and this should receive more attention perhaps from the general practitioner.

Cases of serious import arise in the throat and lungs by the air inhaled not being allowed to pass through the nasal passages which are so arranged when normal as to break the force of the inhalation, modify the temperature and strain out all foreign elements.

The asepticized forefinger is a harmless and efficient means often available even to the general practitioner for determining the condition of this region, and the fact should be borne in mind. A specialist is not always at hand with the reflected light and mirror and often these instruments in the hands of experts have to be laid aside for the invaluable *tactus eruditus*.

THE IMPORTANCE OF UNDERSTANDING THE PHYSIOLOGICAL ACTION OF DRUGS.

T. N. MERIWETHER, SWAN LAKE, MISS.

I am influenced to make these few remarks by an article that appeared in the November number of this valuable journal, entitled "Digitalis in Hemorrhage and Fever." The author, Dr. A. D.

Barr, of Calamine, Ark., advanced some original and highly important ideas which we should all duly consider, and apply practically in our treatment of disease. The doctor speaks of the importance of thoroughly understanding the physiological properties of a drug before administering it. For illustration, he chooses digitalis, and makes his points clear and concise. Supposing all my readers to have read the article alluded to, I will, in connection, try to bring forward and elucidate ideas which have been suggested to my mind, viz.: drugs and the empiricism practiced in their administration.

Digitalis, as we all know, is one of our most reliable cardiac excitors, strengthening and prolonging the organ in systole, not increasing the volume of blood, but sending the life-giving current with more force through the arterial and capillary circulation. From a practical standpoint then, what are the indications for its use? *Functional* inactivity of the heart, with flaccidity and inertia of its muscular structure. As a result the blood flows sluggishly through the arterial system ; there is most probably regurgitation from the aorta into the left ventricle, from abnormal condition of aortic semilunar valve. As a result the capillary circulation is stagnant, indicated by a bluish or cyanotic appearance of the skin at the distal extremities, and a coldness of the flesh even during the warm months. A dicrotic pulse is another strong indication for the use of digitalis. This condition is often a forerunner of hemorrhage, and requires prompt interference. By the drug the pulse rate is diminished, and the force of the current is augmented. Thus the cachexia hemorrhagica is remedied and the diathesis, if any exist, is removed, provided its use be persisted in. Knowing the physiological action of digitalis as we do, what possible benefit could accrue from its use in cardiac atrophy, or fatty degeneration? Absolutely none as far as I can see, it can only augment the trouble. There is one more indication for its use. I desire to call your attention to viz.: A weak and debilitated condition of the entire system after protracted fever or other causes. Here I will have to clash with my friend Dr. Barr for he thinks it contraindicated in fevers where the volume of blood is small. I think so too, except just before and during the convalescent period, but if it is ever called for it is at this time. It is slow in action, and as the machinery of the heart is being gradually gotten into working order we begin to add fuel—nutritious soups, teas, etc.—to our human engine, soon the stomach has the

fuel in a condition to be utilized; it passes into the body, is oxygenated by the lungs, and soon is supplying the organs, bones, muscles and tissues with nutriment.

Some empirical members of our profession prescribe digitalis when there is any semblance of heart trouble in their patient. Suppose the activity of the heart is already too great, what will be the result? Death most probably. The coroner gives his verdict "Death from heart failure, instead of death by a quack doctor," which would be more appropriate.

Of course we all practice empirically sometimes, when theories prove useless, and the result is often favorable. I am not an advocate of too much theory, but only desire to illustrate my idea of the importance of knowing the physiological effects of drugs, for instance, strychnine kills by causing tetanic convulsions, and firmly contracting the heart, then, as a medicinal agent it should be only employed to correct an opposite condition; again, opium, which is a cerebral stimulant, should not be given to relieve pain when there is hyperemia of the brain.

CLINICAL REPORTS OF TREATMENT OF PHTHISIS BY KOCH'S LYMPH.

SYNOPTIC TRANSLATION BY WM. KRAUSS, M. D., MEMPHIS, TENN.

The simultaneous appearance of three extensive clinical reports in one number of the *Therapeutische Monatshefte*, show that Germans the are in earnest. At the meeting of the Berlin Medical Society (Verein fur immerl Medizin), held November 17th, Dr. Frantzel's reports:

"Internal medicine cannot as yet chronicle any phenomenal results; its labors are tedious, the microscopical and physical diagnosis are slow producers, and he would advise those who desire to use the treatment not to take too many patients under observation.

Most experiments were made on phthisical patients, but for control purposes men with sound lungs were also used. Results on these showed that small injections give no reaction, but large ones produce the general symptoms, viz: Rise of temperature to 102° and over, chill, pain in joints, vomiting and general weakness. A distinct reaction from a small dose occured in one person with hereditary taint, kyphosis, sensitiveness of cervical vertebræ, which, together with repeated night sweats, swelling of both

knee joints after injection created a suspicion of latent tuberculosis.

Four cases of hereditary phthisis were not benefited; reaction in three. Subsequent autopsis of two showed no tendency to cicatrization, but cheesy masses were formed in cavities.

Eight cases are reported with dullness in apex, numerous rales, mucopurulent sputum with abundant bacilli, night sweats, some having haemopthisis.

After 15-35 days' treatment the symptoms are generally materially improved. Dullness is diminished in extent and intensity, rales less abundant, cough only in morning, expectoration diminished, of a glassy character, no bacilli for days at a time. General condition improved, increase in weight.

At first only 1 milligramme ($\frac{1}{16}$ grain) was used, later the minimal dose was 2 milligrammes increased as soon as it caused no more fever. Never used more than one decigramme (1½ grs.) Chill usually comes on when temperature has risen to 102° or over. The remedy was only given hypodermically under scapula. F. considers remedy to be specific as evinced by its reaction.

The bacilli are not directly affected, the lymph only kills tuberculous tissue, but they are deprived of their support. They diminish in number and may disappear from the sputum; their appearance is materially changed.

The experience at F's clinic is in exact accord with predictions of Koch. The agent is useless in advanced phthisis; its action in the second stage remains to be determined; it will probably cure the first stage. The brilliant results of surgical cases will not be seen in lung tuberculosis."

At Prof. Levy's clinic three patients in first stage have been discharged as cured, inasmuch as they no longer react after injection. As to permanency of result it is too early to say.

SYPHILIS AND MARRIAGE.

Clinical Lecture by Prof. Fournier.

Translated by Wm. N. Beggs, A. B., M. D., St. Louis, Mo.

Extracted from the Weekly Medical Review.

GENLTEMEN—Among the subjects connected with this problem which I have already frequently discussed with you, I shall today speak of the following:

HUSBAND SYPHILITIC, WIFE SYPHILITIC AND PREGNANT.

Let me explain. A syphilitic man marries too soon and infects his wife, she becoming pregnant at the same time. In this case all the evils are present and the situation is grave. The

prognosis is especially serious for the child. It is destined to die before birth, or to come into the world in a dying condition, or to die shortly after birth, or perhaps to live, but to suffer from syphilis.

This situation, grave as it is, is not absolutely desperate, either for the present or for the future. In the future, if the parents carry out a rational course of treatment, happy pregnancies may result. As for the present, the child is not absolutely condemned.

1. Because, thanks to treatment, you can (not always, it is true) prevent the abortion. The child will, of course, be syphilitic, but it will be viable.

2. Because, in the most fortunate cases, thanks to treatment, you may obtain a healthy child. This is a rare occurrence, but is not impossible. One of my patients, infected by her husband, became pregnant five months later. I saw her in the second month of her pregnancy exhibiting secondary symptoms. The child was born healthy; it is now 5 years of age and has never presented syphilitic symptoms.

M. Langlebert has reported a similar case. It was a woman, who, in the third month of pregnancy, exhibited severe syphilitic symptoms. M. Langlebert instituted proper treatment; the pregnancy followed its normal course and resulted in the birth of a well nourished girl; the child is now 2 years old, and has never presented syphilitic symptoms.

Let us now proceed to the indications. The husband will be warned, that is a matter of course.

What must be done for the woman? I do not hesitate to answer, she must be treated. This reply would have seemed heretical thirty or forty years ago. Syphilitic women were denied treatment during pregnancy, and the following reasons were given:

1. Mercury would induce gastric disorders, increase the vomiting to which the pregnant woman is already very subject. She could, on account of the gastric disturbances, fall into a grave condition.

2. Mercury would anemiate the pregnant woman and augment the hydremia which already exists on account of the pregnancy.

3. It would provoke abortion.

Let us examine the various points:

1. It is easy for us to give mercury in such a way as to avoid gastric disturbances. Let us choose the preparations which are the least repulsive to the stomaeh. We will prescribe neither the liquor of van Swieten nor the syrup of Gibert, the taste of which is very disagreeable. We will choose a more easily tolerated medicament, the proto-iodide, and that in a dose which does not offend the stomach, 0.03-0.05 grain (one-half to five-sixths of a grain). If it is tolerated we can gradually increase the doses. Further, we can add a little opium as an adjuvant, and prescribe conjointly the wine of gentian and coffee, which causes the mercury to be well digested. Moreover, if the stomach is too re bellious, we always have a great resource, mercurial frictions, which we employ freely here, and from which German accouch-eurs have the best results.

2. The anemia which mercury produces is a purely theoreti cal objection, against which experience protests. Here, where mercury is given systematically, we have never seen this anemia produced. On the contrary, it has been properly said "mercury is the iron of syphilis."

3. Mercury produces abortion. Let us leave aside the mercury employed in the arts, which in certain operatives has frequently produced abortion. Here it is a question of mercury employed in therapeutic doses only.

It is not difficult to quote statistics; among so many syphilitics taking mercury so many (and the number is large) have aborted. This, gentlemen, is a mistake in logic, however. It is not the mercury which has caused then to abort, it is the syphilis.

I will prove it:

1. Many syphilitic women abort without having taken an atom of mercury. This is what happens in unobserved, and consequently, untreated syphilis. The abortions are, in such cases, so frequent. that, it may be said, they are the rule.

2. Many syphilitic women, having had a series of abortions, succeed in conducting a pregnancy to full term only when they have been treated with mercury.

I may say that at the present time there is no disagreement over this point. I can assure you that all of our hospital accouch-eurs give mercury in such cases.

The treatment must be administered in a consecutive manner during the entire course of pregnancy with some intervals of cessation.

Intimately united to the preceding is a subject which should now occupy our attention. I speak of a genuine social duty which devolves upon the physician, who should be a zealous aid to public prophylaxis.

The child, born of this syphilitic family, will almost certainly be syphilitic. Now a syphilitic child is a powerful means of syphilitic contagion.

What happens if this child is entrusted to a nurse? He certainly infects her. Now think of the rebounds of contagion which may produce what I have called cascades of contagion. First, the child can infect his surroundings, his relatives and attendants; as for the nurse, she is liable to infect her husband, her own child, other infants to whom she casually gives the breast, etc.

I have many examples in my notes.

A young man infected his wife who gave birth to a syphilitic child. The child infected the nurse. She infected her own child, then another infant to whom she chanced to give the breast, and finally her husband; a total of four infections.

There are cases more serious still. A child infected her nurse. She infected another infant, and then a third. A friend of the nurse one day suckled one of these infants and contracted syphilis. She in turn infected an infant. Total, five infections, and of these two children died.

Frou, (of Lyon,) reports that one nurse infected three infants, each of these infected their mothers. The three mothers in their turn infected their husbands. Total, ten infections

Veritable epidemics of syphilis have thus been imported into villages by a single syphilitic child. In one case reported there were twenty-five contaminations.

This syphilis is always almost recognized, hence the danger. No treatment intervenes, and the afflicted may die, or are burdened with grave lesions. I will give a few examples:

A child infects his nurse, who infects her husband. He is not treated and gets a severe iritis, from which the eye is lost. The wife, years later, has a syphilitic paralysis, symptoms of cerebral syphilis, and dies.

Another case: A nurse is syphilized and infects her child, who is not treated. It dies in a few months. She herself has a severe iritis followed by the loss of an eye. A year later she gives birth to a child which dies at the age of two months.

It is the duty of the physician, who knows these horrible dangers, to put forth all efforts to prevent them. For this there is only one means in existence; it is, that the child, dangerous for all the world, must remain beneath its natal roof and must be nourished by its mother. It is necessary before the confinement to warn the husband, who may be perfectly ignorant of the danger; it is necessary to bring home to him the dangers of infection to which a nurse would be exposed, and the serious consequences which could result from it; charges, scandal, suit perhaps. All this can be avoided, you should say, by having the mother nurse her child. If she herself desires it, encourage her. If not it is necessary to persuade her. You may be assured that the husband, whom you will have thus frightened, will second your efforts.

Some objections may, perhaps, arise in your mind. If the mother is healthy, will she not be infected by the child, perhaps? If, on the other hand, the child is healthy, and the mother syphilitic, will not the mother infect the child?

Let us examine the question in detail. There are four conditions possible, and it is impossible to conceive of others.

1. Mother and child are both healthy.
2. Mother and child are both syphilitic.
3. Mother is healthy, the child being syphilitic.
4. Mother is syphilitic, the child being healthy.

In the first case there is danger neither for the mother nor for the child, since both are healthy.

In the second it is the same. Neither syphilitic has anything to fear from the other.

The third case, on the other hand, requires consideration. Cannot the syphilitic child infect its mother? This could be conceived of *a priori*. This is not the case, however. You remember perhaps the law of Baumies, which I have more than once repeated to you, "a syphilitic child has never been known to infect it mother." That is, the mother, healthy in appearance, is syphilitic in reality; she has latent syphilis.

And, gentlemen, it is the same in the fourth case we have to consider. Here again the Baumies' law finds its application, "the syphilitic mother does not infect her healthy child;" and that for the same reason. This child, healthy in appearance, is syphilitic in reality.

I will add further that were we not assured by experience as

we are in these latter cases, our course of conduct ought not to be changed. The maternal nursing would be just as imperative a duty, for we have not the right to dispose of the health of another and to expose another woman to an almost certain infection. If maternal nursing is impossible an expedient must be sought as the employment of a female animal, the ass, for example.

Gentlemen, thanks to these thoughts, it will be possible for you to fulfill a social duty, that of combatting syphilis, and circumscribing its limits as much as possible.—*La France Medicale.*

THE ABORTIVE TREATMENT OF ERYSIPELAS.

In the *Gazzetta degli ospitali* for October 22, 1890, Dr. Natale Amici adds some remarks to those first published by him in 1885 upon this subject. His method of treatment consists in destroying the streptococcus of erysipelas in the shortest possible time. He insists that the infection is not always limited by the border of the erysipelatous blush, but often extends beyond this into the apparently sound skin, even to a distance of 40 centimetres. This *latent* erysipelas should be treated as well as that which is visible, and herein lies the success of his method. The chief sympton of latent infection is tenderness on pressure in the apparently healthy skin contiguous to that which is already red and inflamed. Amici has succeeded best with carbolic acid and corrosive sublimate. In using carbolic acid, he formerly combined it with alcohol, taking equal parts of each. This application was effective, but caused smarting and discoloration of the skin. He has therefore replaced the alcohol with glycerin, the proportions remaining the same. The mixture is to be applied every two hours over the whole of the affected parts, and its use continued so long as there is any symptoms of extension of the infection. With persons with a very delicate skin, or with children, the intervals may be made longer. Under this treatment all symptoms of erysipelas disappear within two or three days. Should the subcutaneous tissues be involved (phlegmonous erysipelas), hypodermic injections of a 1-, 2-, or 3 per-cent. aqueous solution of carbolic acid are to be made with a Pravaz's syringe, according to Hueter's method. The urine should be always carefully watched, and, should it show too great an absorption of carbolic acid, the application must be diminished in number or even entirely abandoned. Amici has never seen any bad re-

sults when precaution was observed. Some individuals can not tolerate the odor of carbolic acid. In such cases Amici employs a 1-per-cent. solution of corrosive sublimate in glycerin, to be used in the same manner. The patient's gums should be carefully observed to avoid mercurial stomatitis.—*N. Y. Medical Journal.*

A BLUSH.

J. L. ROLLINS, M. D., AUBURN, CAL.

A blush is a temporary erythema and calorific effulgence of the physiognomy, ætiologised by the perceptiveness of the sensorium when in a predic ment of unequilibrity from a sense of shame, anger, etc., eventuating in a paresis of the vasomotor nervous filaments of the facial capillaries; whereby being divested of their elasticity, are suffused with radiant, ærated, compound-nutritive circulating liquid, emanating from an intimidated præcordia.—*Dixie Doctor.*

PILOCARPINE IN ALCOHOLISM

Is administered by Dr. Josham (*Medical Record*) in 1-3 gr. dose hypodermically. Its sobering effects are said to be remarkable. Sleep ensues, and the patient wakes up a perfectly rational being. The tense, red, bloated countenance, the bleared, congested eyes pass away, the features become calm and easy, the skin soft and clear.—*Dixie Doctor.*

HAY FEVER CURE.

Dr. Moorhead writes in the *British Medical Journal* that he has obtained relief from hay fever, his annual persecutor for thirty years, by hypodermic injection of $\frac{1}{20}$ grain of morphine and $\frac{1}{200}$ grain of atropine night and morning. The relief was complete.—*Dixie Doctor.*

MENTHOL FOR CHAPPED HANDS.

A writer in the *Provincial Medical Journal* offers the following: Menthol, 15 grains; salol, ½ drachm; olive oil, ½ drachm; lanolin, 1½ ounce as a soothing application for chapped hands. The pain, he says, is at onced allayed after the first application, and the skin at the same time is softened. The fissures will heal promptly under a systematic use of the application once or twice daily.—*New York Medical Journal.*

DEPARTMENT OF

SURGERY.

CONDUCTED BY

W. B. ROGERS, M. D.

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To whom all matter pertaining to this Department should be addressed.

SYNOPSIS OF REPORT OF EXTRAORDINARY SESSION OF BERLIN SURGICAL SOCIETY, HELD NOVEMBER 16, 1890.

TRANSLATED BY WM. KRAUSS, M. D

Among the visitors were Thirsch v. Esmarch, Koenig, Madeling v. Ziemssen, etc. The occasion was the presentation of surgical cases treated with Koch's lymph. Prof. v. Bergmann introduced the subject with much emotion and warmth, expressing regret at the absence of the great savant.

The cases were arranged into three categories, the first embracing thirteen cases of lupus. Five of the patients had received 1.100 injections of lymph into skin of back in the morning.

Case 1. fifty-eight years old; had lupus 29 years. Temperature before injection 97.1°. Temperature in all cases taken every two hours. Injection at 8:45 a. m., at 2:30 p. m., temperature begins to rise and rapidly reaches 101.4°. The action of the remedy is twofold. First, a general one, the production of a fever; second, the singular effect on all tissues which are tuberculous. In this demonstration the term local action is confined to tuberculosis of a surgical nature. This patient (No. 1) has lupus in face and hands. This morning the center of the affection was pale, enveloped in nodulus. Now the whole part is swollen, swelling and redness are increasing; action is similar to Fehleisen's Erysipelas inoculation.

Case 2. Boy, aged 14; fresh lupus. Koch is correct in observation that the fresher the lupus the more energetic the reaction. In this case the febrile movement has been much more severe. Boy lies somnolent, temperature has risen from 97.7° to 105.8°; he received the full dose; the unrecognized submental nodulus are swollen in addition to face.

Case 3. Woman past middle age; superficial lupus on both

cheeks up to ears. Decided rise of temperature (106.1°) vomiting, violent local swelling of diseased tissue, of central scar (apparently well), and the supposedly intact ear.

Case 4. Superficial submental lupus, extending well over the neck, apparently healed centre with wreath of nodulus; temperature 97.7°; 99.5°; 103°; chill at 104.7°. Entire submental region *and neck* swollen, great confluence of nodulus, formation of a white marginal zone and hyperemic ring; *nose, hand, forearm and one knee joint*, all of which were not known to be infected were also swollen.

Case 5. twenty-five years old; multiple forms of lupus. General reaction as in No. 4; temperature 98, 100.6, chill, now 104.3.

We thus find fever following injection, reaching its acme in 12–15 hours, and gradually declining; secondly, all parts in which tubercular products are located become hyperemic and painful.

II. Presentation of cases in which Dr. Pfuhl is now making injections. These cases can be seen tomorrow at clinic beginning at 10 a. m.

Case 6. Profound multiple tuberculosis of skin, existing 11 years; nodulus in face, at both forearms and legs; nose apparently free, also ears; whole dose.

Case 7. Boy aged 13 years, typical lupus in face, nose partly destroyed; half dose.

Case 8. Student aged 17 years; high grade kyphosis, several glands have been extirpated, bone sequestra extracted, and abscesses opened. Most renowned surgeons in Germany have failed to cure the lupus; lungs being affected, only $\frac{3}{10}$ parts are injected.

Case 9. Female 23 years; lupous destruction of nose appears cured. Fresh nodulus on mouth and cheek.

Case 10. Female 31 years; facial lupus for six years, ectropion after operation; fresh nodulus. Both 9 and 10 receive full doses.

The following three cases have been under treatment since November 6th:

Case 11. twenty-eight years old; lupus for four years; five injections to date. From the effects of these injections the temperature rose quite in accord with Koch; November 6th no fever, injection; temperature rises to 104, declines gradually; November 8th second injection, same dose, less fever; November 9th no fever; November 10 stronger injection, greater rise of temperature; No-

vember 12th still stronger injection, fever 103.1; November 14th still stronger, fever 101.2. Injections will be increased until, according to Koch, no further rise of temperature occurs. Case shows marked improvement, lips reduced to one-third thickness. Tumefaction of ervical glands has disappeared.

Case 12. Affection of hard palate and alveolar process. Decided local reaction, disappearing on fall of temperature. Now reduced to smooth granulating sore, but v. Bergmann *does not consider him cured, although large doses are no longer followed by reaction.*

Case 13. Apparently well after first injection, has since returned with localized infection elsewhere. The following case teaches the very great diagnostic value of control experiments on healthy or comparatively healthy individuals.

Case 14. A well developed, powerful man has a fissured ulcer not very hard at base—thus excluding cancer (Virchow)—diagnosis lay between gumma and tubercle. The former was proved by microscopic examination, the latter excluded by inaction of lymph.

Case 17, Is peculiar, five injections since November 6th; typical dimunition of exacerbations after each dose, but an exanthem resembling measles each time. Fever peculiar in beginning later and lasting longer than usual. This is ascribed to encapsulation as verified by surgical procedure.

III. Affections of Joints and Bones.

Cases 18 to 35 inclusive. These demonstrate the necessity of grading dose according to severity of case ; the more involvement of tissue the smaller the initial dose. When encapulation and suppuration exist the reaction is slower and of longer duration. In case 34 the reaction was dangerous, resulting in intermittent pulse, rendering hypodermics of camphor and ether necessary. Case 35 remained without reaction. Encapulation was suspected. On incision no tuberculosis found ; healed under antiseptic treatment without fever.

IV. Four cases Laryngeal Tuberculosis, with destruction of arytenoid cartilages, ulceration, etc. Reaction in all much slower. In 4th case a *necrotic conglomerate of tubercular masses sequestered from anterior border of rima glottidis.* The diagnostic value of these experiments is very great ; it is impossible to differentiate some cases from carcinoma, even after microscopic examination. Prof. v. Bergmann concluded with the observation that purulent cases would still have to be treated operatively but the in-

jection probably secured immunity from recurrences.

Dr. Kohler: I cannot yet record any positive cures. In one case there was some subsequent degeneration; patient is still under treatment. One case of tubular knee joint is improving.

With a resolution of thanks to Koch the meeting adjourned at 9:45 p. m.—[Reported by Dr. Holz, Berlin.

BOW-LEGS AND KNOCK-KNEES.

M. DEPASS, M. D., HOUSESURGEON HOSPITAL FOR RUPTURED AND CRIPPLED, NEW YORK CITY.

The following is a report of twelve cases of operation for deformities of the lower extremities, with results, performed in the hospital for ruptured and crippled of New York City; six for knock knees, and six for bow-legs. The operation for both, practically a subcutaneous osteotomy; if for knock-knees, the femori are divided just above the condyles; if for bow-legs, the tibiae are divided at about the junction of the upper and lower halves, in some cases the fibulae have also to be divided, but not often as they can usually be bent sufficiently.

The operation is very simple. The parts being thoroughly cleaned, and the limb resting on a small sand bag; the skin is drawn aside with one hand, while with the other, the osteotome (Vance) is inserted through the soft tissues, the blade being parellel with the long axis of the bone. When the bone is reached, the blade is turned at a right angle to it, then with light blows of a mallet, and gradually moving instrument from side to side, the bone is divided about three-fourths through; the osteotome is then quickly withdrawn, and the skin allowed to assume its normal position, thus closing the opening to the bone. With the hand the fracture is completed; the deformity corrected, a ligh antiseptic dressing applied and then fixed in plaster-of-Paris. If for the knock-knees the plaster extends from around the feet to about the middle of the chest; if for bowlegs it extends only to upper part of thigh.

The plaster is kept on for three or four weeks when it is usually removed, but a lighter one applied which is also removed in from two to three weeks more and the patient allowed to walk.

Sometimes the deformity is not entirely corrected by the operation, in which case a brace is applied, usually when the plaster is first removed, and worn until deformity is perfectly corrected. As I am unable to exhibit photographs of the cases, I

think the best means of giving results is, if for knock-knees, to give before and after the operation, the distance between the inner malleoli when the knees are in contact; if for bent legs the distances between the knees, and between the tibia where they are furtherest apart, when the inner malleoli are in contact.

Case 1. Female, age 7½; knock-knees, December 15, 1889—Admitted to hospital, distance between malleoli six inches. December 25th, under ether, operation performed. January 15, 1890, plaster removed but lighter one applied. February 4th, plaster removed, union firm, wounds closed, malleoli about three-fourths inches apart limbs symmetrical. Feb. 10th, walks with hardly perceptible deformity; discharged.

Case 2. Female, age 6; knock-knees, January 8, 1890—admitted. Distance between malleoli 5½ inches. January 13th, under ether, operation performed. February 5th, plaster removed but lighter one applied. February 21st, plaster removed, union firm, wounds closed, limbs straight. February 26th, walks perfectly; discharged.

Case 3. Male, age 7; bow-legs, January 3, 1890—admitted. Between knees 2¼ inches, between tibiae 3 inches. Also has slight anterior curve in tibia. January 5th, operation performed. March 6th plaster removed, l ony union firm, slight discharge from wound on right side, knees in contact, about ⅓ inch between tibia, light plaster applied. March 19th, plaster removed, wound on right side entirely closed, the anterior curve in tibia is all the deformity remaining, but this is so slight that it can not be seen when patient is dressed. March 24th, walks well; discharged.

Case 4. Male, age 4½; knock-knees, March 1, 1890—admitted, 3¾ inches between malleoli. March 3d, operation performed. March 5th, temperature 100.2°. March 8th, temperature normal. April 1, plaster removed, union firm, wounds closed, the knock-knees have been converted into slight bent legs, the knees being about ½ inch apart. June 5th, limbs symmetrical, walks perfectly; discharged.

Case 5. Female, age 6¼; bow-legs, March 27, 1890—admitted. Knees about ¾ inch apart, tibiae 2 inches. March 28th, operation performed. June 6th, plaster removed, union firm, wounds closed, limbs parallel. June 15, walks with slight stiffness in right knee which is improving; discharged.

Case 6. Female, age 4, knock-knees, May 15, 1890—admit-

ted. Distance between malleoli 5¼ inches. June 3d, operation performed. July 7th, plaster removed, bony union firm, wound on right side discharging slightly, limbs parallel. July 12th, no discharge from wound on right side; is allowed to walk, but does so quite awkwardly as there is considerable rotation outward of both limbs. August 5th, when limbs are examined no deformity is noticed; still has awkward walk but somewhat improved since last note; discharged.

Case 7. Female, age 4½; knock-knees, May 10th, 1890—admitted. Distance between malleoli 4¾ inches; has also marked anterior curve in tibiæ; walks with feet widely separated. May 13th, operation for knock-knees performed. May 20th, temperature normal. June 5th, plaster removed, bony union fair, wounds closed, still has slight knock-knee on right side. June 7th, wedge-shaped piece of bone removed from each tibiæ, the anterior curve corrected and a double plaster spica applied. June 13th, temperature normal. July 13th, plaster removed; union firm in tibiæ, and femori; wounds closed; anterior curve in tibiæ entirely corrected; still has slight knock-knee on right side, light plaster applied. July 20th, plaster removed and a right Thomas knock-knee brace applied; patient allowed to walk. September 3d, brace removed; limbs parallel; walks well; discharged.

Case 8. Male, age 4½, bow legs, October 29, 1889—admitted. Between knees 1¾ inches, between tibiæ 2½ inches. November 1st, operation performed. November 5th, temperature normal. December 2d, plaster removed; union good; wounds closed; has still slight bow-legs, about ⅓ inch between knees and ¾ inch between tibiæ; measure for pair of Knight Bros.' leg braces. December 14th, braces applied. February 1st, 1890, braces removed; limbs straight; discharged.

Case 9. Male, age 6, bow legs, July 19, 1889—admitted. 2 inches between knees, 2½ inches between tibiæ. July 26th operation performed. August 19th, plaster removed; union firm; wounds closed; knees touch, but there is still slight bow in tibiæ, they being about ¾ inch apart. August 27, deformity seems quite marked when walking; wearing shoes built up on inside from heel to toe; at request of mother is discharged.

Case 10. Male, age 5, bow-legs, April 9, 1890—admitted. Between knees 3 inches, between tibiæ 3¼ inches. April 15th operation performed. May 12th, plaster removed; union good;

wounds closed; light plaster applied. May 28th, plaster removed; limbs practically straight. June 4th, walks well; discharged.

Case 11. Male, age 4, knock-knees, January 28, 1890—admitted. Distance between malleoli 3½ inches. February 2d operation performed. February 27th, plaster removed; union firm; wounds closed; limbs straight; light plaster applied. March 9th, plaster removed; allowed to walk. March 20th, no deformity noticed when walking; discharged.

Case 12. Male, age 5, bow-legs, September 30, 1890—admitted. Between knees 2½ inches, between tibiæ 2¾ inches. October 4th, operation performed. October 26th, plaster removed; union good; wounds closed; light plaster applied. November 13th, plaster removed, union firm; knees touch; ½ inch between tibiæ. November 20th, walks fairly well with slight limp; discharged.

The above cases were not selected with any regard as to what the results were; in fact, they were not selected at all, for in going over the histories of patients discharged during 1890, I took but the first six cases of knock-knees and the first six of bow-legs that I came across.

DEPARTMENT OF

GYNECOLOGY.

CONDUCTED BY

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REPORT TO THE COMMITTEE ON SURGERY.

(Read before the Tri-State Medical Association.)

BY T. J. CROFFORD.

In making this report to the committee on surgery I shall be as brief as possible, not even individualizing all the cases, but report them *en masse* with the exception of the abdominal ones and here I shall content myself with a very brief synopsis of each case avoiding the tediousness of detail as much as is at all compatable with bringing out the points of interest.

TRACHELORAPHY.

This operation has been done twelve times. In four

of the cases the tear was bilateral and demanded repairing both sides. The stitches used have been wire and silkworm gut. I am more inclined to silk than ever before and will in future use it more. The wire cuts the tissues too severely. There has been a change of opinion as regards the value of the operation. Many cases operated upon by surgeons a few years ago are now quite as successfully treated by curing the endometritis and subinvolution upon which the symptoms depend. The operation has a distinct place in surgery recent high authority to the contrary notwithstanding. In quite a large number of cases the repair of a torn cervix is best supplemented by another operation viz.:

CURETTING.

Which has been done twelve times for endometritis associated or not with fungous, degeneration of the endometrium. A few years ago this operation was reserved for the above named condition, but now under the teachings of Martin and others it is a frequent means of curing endometritis and sub involution. Many times have uteri which measured 3½ and 4 inches been reduced to 2½ and 3 by this means alone. I use none but the sharp curette. The operation should be done under irrigation and the strictest cleanliness otherwise its simplicity may be turned into gravity. In many cases it is necessary to precede the operation by a dilatation of the cervical canal. Independent of a slight dilatation of the cervix for the purpose of more thoroughly curetting, we have for stenosis and its symptoms to report in this paper eight cases of thorough

DILATATION.

Dilatation of the cervix. Frequently endometritis and its symptoms, sterility and finally ovarian tubal and pelvic trouble are fostered for the want of drainage incident to a constricted cervix. I contend that many cases of diseased tubes and ovaries which may finally need removal can be prevented by directing remedies to a cure of the endometritis. Prominent among these remedies being drainage of the uterus. I have at this time several women with ovaries as large as goose eggs who have absolutely no symptoms since I have established a good drainage through the cervix.

PERINEORRHAPHY.

Being called upon occasionally by my neighboring phy-

sicians to stitch up a newly torn perineum and having an occasional case in my own practice I am prepared to report ten cases of the primary operation, two of them torn through the sphincter; I can also report ten cases in which the secondary operation has been performed. Three of these were torn through the sphincter. All were entirely satisfactory.

VESICO-VAGINAL FISTULA.

I have to report two cases of vesico-vaginal fistula. Both were caused by delay in the delivery of the head of the child. One was a small opening at the neck of the bladder. The other was an opening twice the size of a silver dollar and involved almost the entire base of the bladder through which the fundus protruded. There was also a large recto vaginal fistula in this case. After reducing the fundus of the bladder, which protruded through the fistula, dividing the bands, paring the edges and stitching up the opening we had to contend with the urine on one side and the feces on the other, for the larger portion of them come through the vagina. After cleansing the rectum thoroughly we introduced a large tampon five inches up the bowels and allowed it to remain for three days. In this way we kept away the threatening fecal infection which might otherwise have defeated an operation which was in all respects successful.

FIBROID TUMORS.

Recently we have encountered four cases of fibroid tumors of the womb, three were of the sub-mucous type. We removed two of these readily with the ecraseur. The other two could not be dealt with in this manner. Upon these we have used electricity after the apostoli method. One, a large, hard, irregular subserous fibroid has not been materially benefited by the treatment. The other, a large, soft sub-mucous fibroid attached on the posterior portion of the inside of the womb from the fundus to the cervix and measuring six inches in length has been reduced to the size of a goose egg. The exhausting and dangerous hemorrhages have ceased. The patient has gained strength, blood and spirits, and no doubt in a short while will be discharged cured. We have not done a hysterectomy within the last year, not having a single case that could not be kept above the danger point by other methods less formidable.

CANCER OF THE UTERUS.

Within the last year we have encountered four cases of far advanced cancer of the womb. Not having met with a case suitable for the radical operation of removing the entire organ. The cauliflower excrescence and tumor like enlargements have been removed by means of the ecraseur, scissors, Simons spoon, etc. This is usually followed by the application on absorbant cotton of a 30 or 50 per cent. solution of chloride of zinc or less of chromic acid which still further removes the diseased tissue. They have all been benefited by the treatment, but of course this is only temporary.

STRICTURE OF RECTUM.

We have met with stricture of the rectum three times; two of these were of specific origin, the other malignant.

STRICTURE OF VAGINA.

We have had one case of stricture of the vagina the result of inflammation following delivery.

CYSTOTOMY.

Among the cases of chronic cystitis recently encountered there have been five that have not responded to a diligent treatment by the ordinary methods of irrigations and direct applications, but have required in addition to a continuance of these, rest of the organ. This has been given by means of Emmett's Button Hole opening through the cysto vaginal septum. Of these five cases four have done quite well, the other has not progressed altogether so favorably but is decidedly improved and will, like the others, I believe, soon get well. There is one point in the management of these cases to which I desire to call especial attention and that is to the importance of making the urine acid, and the value of the Dilute Nitro Hydrochloric acid accomplishing this important fact whereby you get rid of the irritating phosphatic precipitate as well as others which greatly aggravate the disease.

AMPUTATION OF CERVIX UTERI.

The cervix uteri has been amputated three times for elongation, sterility, dysmenorrhoea and its attendant symptoms. The symptoms have been cured. It remains to be found out whether the sterility is cured.

We have had one case of

ACUTE HYPERPLASIA OF THE MAMMÆ

In which we removed both breasts, the left weighing 13 and the right 11½ pounds. This patient was a girl 15 years old. The growth was of ten months' duration. Her recovery was perfect. This case will be reported in full shortly.

DEPARTMENT OF

DISEASES OF THE EYE AND EAR

CONDUCTED BY

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REMOVAL OF CATARACT AND RESTORATION OF SIGHT AFTER TWENTY-THREE YEARS OF BLINDNESS.

BY JAMES L. MINOR. M. D., MEMPHIS, TENN.

So frequently are cataracts removed with restoration of sight now-a-days, that the operation has ceased to be a novelty, and to make the report of a single case interesting, it must possess individual features not ordinarily met with. I operated upon a case last spring which offered these indications, and venture to report it.

The patient was an old man who had been blind for twenty-three years, and the interest from a medical standpoint, is found in the fact that vision was easily and perfectly restored after this long period of blindness. It was a negro who had lost his sight the year after he had gained his freedom, and, having retained the characteristics of the anti-bellum negro, was possessed of that native simplicity of trust and feeling which made the result of the operation as gratifying to me as it was wonderful to him. Another point of interest was, that he had been blind so long and had learned to depend so completely upon his sense of touch that he was slow to give it up—indeed, vision was a new sense to him, which had to be cultivated before he could be made to rely upon it. The notes of the case are as follows:

Isam Finly, sixty odd years old, from Wallerville, Miss., consulted me on March 7, 1889, for blindness, which had come on the year after the war, and remained practically unchanged since. He could tell the difference between light and darkness, but could not distinguish even the largest object. I found on examina-

tion that the blindness was due to cataract in each eye, and operated upon the right as follows:—The eye was washed freely with a solution of boracic acid, and a few drops of a 4 per cent. solution of cocaine were instilled; the lids were held apart with a speculum, the eyeball steadied with fixation forceps, and an upward section was made in the cornea near the scleral margin, including about one-third of its circumference—next a drop of the cocaine solution was introduced into the anterior chamber to anesthetize the iris, and a good free iridectomy was made. The capsule of the lens was then opened at its periphery, and the cataract was evacuated without difficulty. The eyes were both closed with a compress bandage which was allowed to remain in position for three days, during which time the patient was kept in bed in a moderately darkened room. On the third day the bandage was removed, the wound had closed, the eye was free from irritation, and he could see. The lids were closed with a narrow strip of adhesive plaster, which was changed daily for three days; he was allowed to get out of bed, but was confined to his room. On the sixth day after the operation, all dressings were removed from the eye, a shade was furnished, and he was allowed to go out. He continued to use his stick, and to grope around, although he could see well enough for all purposes, and would use his eye when told to do so, yet it was experimental and short lived, for he would quickly lapse into the old habit. Two months later, with the aid of glasses, his vision was nearly normal (20-30?)and he could recognize the small letters in a newspaper without difficulty. By this time he had begun to depend upon his eyesight, over which, he was as happy and enthusiastic as a child.

INTERSTITIAL KERATITIS.

BY CHARLES H. MERZ, A. M., M. D., SANDUSKY, O.

The following history will serve to illustrate a class of cases with which the physician is frequently brought into contact. While there is nothing unusual in the method of treatment, the case, owing to its advanced stage and severity, may prove of interest.

On August 28, Miss G., æt. 20 years, was brought to my office at the suggestion of her attending physician. She was suffering from almost total blindness, having perception of light only, and was unable to see any object that was even directly in front of her. She had been under treatment for some time, her phy-

sician having used atropine and various other mydriatics in his efforts to improve her vision.

Upon examination, the entire cornea of each eye was found to have undergone an inflammatory change, but there was no tendency to ulceration or to the formation of pus. The cornea presented a cloudy, ground-glass appearance, the pupils and irides being hidden entirely from view. The opacity had assumed a yellowish red appearance. There was intense photophobia lachrymation and considerable pain—especially in the supra-orbital region and back of the eye. In addition to this, the ocular conjunctiva was very much congested. Upon oblique examination there were found numerous minute blood-vessels formed in the tissue of the cornea, giving the "salmon patch" of Hutchinson. The history of the case was that both eyes had been attacked simultaneously. Upon examination with the ophthalmoscope, flakes of blood could be detected in the anterior chamber of both eyes and the aqueous humor proved to be turbid.

The case had been treated by various astringent washes without any perceptible improvement in vision or photophobia. The history of the case was carefully studied and the conclusion reached that the cause was a constitutional, specific one. The teeth were small, the nose-bridge sunken and the upper central incisors were notched on the edges. The family history was difficult to obtain and threw no light on the case. In this connection, the statement of Nettleship led to the confirmation of the diagnosis:

"I have found other personal evidence of inherited specific trouble in 54 per cent. of my cases of interstitial keratitis, and evidence from the family history in 14 per per cent. more—total 68 per cent, and in the remaining 32 per cent. there have been strong reasons to suspect it. Treatment was commenced by instillations of cocaine and atropine 4 per cent. and the following formula:

℞ Hydrargyri bromidi - - - gr. j.
Kalii iodidi - - - - - ʒiij.
Ammon. iodidi - - - - ʒjss.
Tr. gentianæ comp., q. s. ut ft - ʒiv.

Sig: Three times a day take one teaspoonful in water.

Improvement was very slow, but marked. After a week of this treatment, finely powdered iodoform was dusted into the eyes twice a day, and hot fomentations used morning and night

At the expiration of the second week I prescribed the hypophosphites with ol. morrhuæ and a pill of quin., ferrum et nux vom. The hot fomentations and the iodoform were continued. Improvement was now more marked. The cornea had become much clearer and she was able to see a figure standing before her. The pain and lachrymation lessened. She was again placed upon the iodides and a solution of eserine gr. i to ℥j dropped in the eye night and morning and atropine (gr. iv-℥j) at noon. During this time the patient took her daily exercise and morning sponge bath with the use of the flesh brush. Under these hygienic measures her general health and nutrition became very much improved. In addition to using smoked glasses, she was kept in a room shaded from direct light.

At this time, after six weeks of this treatment, the patient has regained almost normal vision. All pain and discomfort have disappeared, but there remain still one or two minute opaque points on the cornea but they are not over the pupillary area, and consequently do not interfere with the vision. The general health of the patient has returned to its normal standard.

Two facts in the case are of special interest. The first is the short time required to effect a cure—the usual time being six months or a year. This is attributed to the free use of hot water and iodoform. The power of hot water in removing inflammatory products is well known. The water was used on compresses as hot as it could be borne. The iodoform was finely powdered and dusted freely. The hyperæmia induced by the mechanical irritation of iodoform undoubtedly assists in removing the inflammatory products.

The second point is the large percentage of cases in which a constitutional or inherited specific trait enters as a factor. In every instance in the writer's observation, interstitial keratitis has been traced directly to this source. Each case will require its own special treatment, but in general indications the mercurials and iodides with tonics should be freely administered, and the use of hot water, iodoform, eserine and atropine persisted in. The case is remarkable for the speedy recovery that followed the use of these remedies.—*American Journal Ophthalmology.*

COCA IN HOARSENESS OF PROFESSIONAL SINGERS.

The Journal of the American Medical Association of May 3d, 1890, gives a valuable article entitled, "Hoarseness in Professional Singers and its Treatment," by Chas. E. Sajous, M.D, Lecturer of Laryngology and Rhinology, Jefferson Medical College: [We extract the following.]

"Of great assistance in the treatment of these cases, is the use of coca wine when taken not only a half hour before the performance, but at the end of each act, so as to obtain the benefit of 'toning' action when the next act is about to begin. That the 'toning' action is not due to wine proper, as some believe, is demonstrated by the fact that sherry, the most alcoholic of all wines, does not at all give the singer the smoothness and ease of execution obtained from coca wine, while liquors, such as whisky or brandy, tend to increase hoarseness, if present, or to cause it, if it is not. An interesting paper on this subject was recently read before the Societe de Medecine Pratique by Dr. Sandras, of Paris, who thought he could ascribe to the use of cocaine and coca internally or by atomization, cases of aphonia occuring in his practice. That cocaine used locally in any form may produce aphonia, there is no doubt; but that coca administered internally should, is disproved not only by clinical experience, but by our knowledge of the physiological properties of the drug.

"As demonstrated by Laffont, the action of coca upon the nervous system is one of stimulation, which exerts itself principally upon the constrictor fibres of the sympathetic. The 'toning' action of the drug on the larynx is thus clearly explained by the intimate functional relation between the vagus and the formation of the voice, which depends in reality upon the action of the constrictor muscles. That paralysis may be due to overstimulation by coca, is negative by the vigorous condition of the natives of Peru, Bolivia and Columba, who are, on the contrary, noted for their staying powers, which they ascribe to their constant use of coca leaves. The fact, however, that many of the coca wines on the market are but solutions of cocaine in either sherry or port wine, renders it quite possible that anesthesia of the posterior portion of the larynx might be caused by contact with the drug during the act of deglutition, and thereby interfere with the functions of the vocal organs. I noticed this effect —a stiffness in the throat—while trying a number of brands to ascertain which would best serve my purpose. The preparation

which prescribed ('Vin Mariani') made from the leaves does not produce this effect, owing to the infinitesimal quantity of cocaine that it contains—gr. 1-60 to the ounce—all anesthetic action being furthermore antagonized by the tannic acid present, not only in the leaves themselves, but in the exceptionally pure claret forming the excipient. A great advantage of 'Vin Mariani,' is that it exerts its action without giving rise to constipation. It can for that reason be administered continuously with much benefit at times in cases in which muscular weakness causes tremulousness of the voice."

THE MEMPHIS JOURNAL

OF THE

MEDICAL SCIENCES.

PUBLISHED MONTHLY AT $1 00 PER YEAR; SINGLE COPIES 10 CTS.

EDITORIAL CORPS.

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SHEP. A. ROGERS, M. D. JAMES L. MINOR, M. D.

Original articles and clinical reports are elicited. Contributors are notified that all matter forwarded us, is received with the distinct understanding that said matter has never appeared in print, and will not be allowed to appear in any other journal prior to its publication in this. All such matter should be sent directly to the editor to whose department it pertains.

Secretaries of medical and surgical societies will favor us by sending dates of regular meetings, with brief programme of important subjects coming before the meeting.

All matter must be in our hands on the 15th of the month preceding its publication.

The JOURNAL will be issued about the 5th of each month.

All communications other than provided for above, should be addressed to

JAS. L. MINOR, M. D., Editor,
Memphis, Tenn.

WM. KRAUSS, M. D., Business Manager.

MALARIAL HEMATURIA.—The importance and prevalence of this disease in—and we can almost say its restriction to—this section of the South, is appreciated by the profession at large, and to its members within our own territory, they must look for its elucidation. So far they have looked in vain, for we understand nothing positive concerning its pathology, little of its treatment, and not a great deal of its behavior. Lack of generalized effort on our part, and paucity of good literature account for such absence of crystalized opinion, and we should see to it that this

charge is removed. Committees have been appointed at previous meetings of the Tri-State Medical Association, to collect data which would lead to a better understanding of the disease, but general interest has never been elicited, and the work done amounts to *nil*.

At the last meeting of the Tri State Medical Association of Mississippi, Arkansas and Tennessee, the usual committee on Malarial Hematuria was appointed, and very properly the chairman, Dr. Krauss of Memphis, was selected because of his practical knowledge of microscopy and pathology. This committee will make a determined effort to collect the most exhaustive data for a study of the disease, and at an early date will send circulars to all members of the Association requesting specific information concerning each case of malarial hematuria observed; instruction and material will be sent for the collection of specimens of blood and urine, which are to be sent to the chairman for chemical and microscopic examination. It must be remembered that much labor must be done and some expense incurred by the committee in pursuing these investigations, and that intelligent co-operation on the part of every member of the Association, will be necessary to insure their success.

THERE is no visible supply of Koch's lymph in Berlin. An effort is being made by the Prussian Government to erect institutes for the manufacture of the lymph and treatment of cases.

ADMINISTRATION OF MORPHINE BY THE NOSTRILS.—Kline has administered morphine by the nose in more than one hundred cases, and claims for this method superiority over all others. The dose, which is the same as that for hypodermic injection, is used in powdered form, and is snuffed or blown into the nose. Absorption is almost instantaneous; its effects come on more quickly than when given hypodermatically, and entire freedom from unpleasant constitutional symptoms, is claimed.

OPIUM ADDICTION AS RELATED TO RENAL DISEASE.—With the object of advancing scientific study and settling a now mooted question, Dr. J. B. Mattison, of Brooklyn, offers a prize of $400 for the best paper on "Opium Addiction as Related to Renal Disease," based upon these queries:

Will the habitual use of opium, in any form, produce organic renal disease?

If so, what lesion is most likely?

What is the rationale?

The contest is to be open for two years from Dec. 1, 1890, to either sex, and any school or language.

The prize paper is to belong to the American Association for the Cure of Inebriety, and be published in a New York medical journal, *Brooklyn Journal, and Journal of Inebriety.*

Other papers presented are to be published in some leading medical journal, as their authors may select.

All papers are to be in possession of the Chairman of Award Committee, on or before January 1, 1893.

The Committee of Award will consist of Dr. Alfred L. Loomis, Pres. N. Y. Acad. of Medicine, Chairman; Drs. H. F. Formad, Phila.; Ezra H. Wilson, Brooklyn; Geo. F. Shrady, and Jos. H. Raymond, editor *Brooklyn Medical Journal.*

THE NEW YORK MEDICAL JOURNAL fills a welcome place on our exchange table. It is conducted on a policy which is progressive, yet conservative, and its pages are full of reliable medicinal news. We value none more highly.

AMERICAN PUBLIC HEALTH ASSOCIATION.—The eighteenth annual meeting of the American Public Health Association was held in Charleston, S. C., December 16, 17, 18 and 19. The meeting was well attended, and the work done important and voluminous.

BOOK REVIEWS.

THE PHYSICIAN. All Requisite Time and Labor-Saving Account Book, designed by Wm. A. Seibert, M. D., of Eastern, Pa., Published by F. A. Davis, Philadelphia. Price, 300 pages, $5; 600 pages, $8.

If he happens to know something of the process it is no burden for the young doctor at the beginning of his profession, to carry the charges against his first patient through the intricacies of blotter, day-book, journal and ledger. Indeed, he finds occupation and a pleasure in nursing the names and item and writing them in as many places and varieties as possible.

Many years later he may have so dealt with fortune or fortune with him that he finds his business justifies the luxury of a bookkeeper. To whom this comes, he also is unmindful of the unabridged method of "business colleges."

A large majority of doctors are not of either class and the

book we are reviewing by its simple method will save them the study of a system of bookkeeping, will enable them to save some dollars in charges that might otherwise be neglected and allow some hours saved to be spent in study or with the wife and babies.

A. B. H.

NAGEL, W.: THE ANATOMY OF THE HUMAN OVARY.—Arch. f. Gyn., xxxvii., 3).

It is erroneous to consider an increase in the visible follicles as a pathological event; it is a distinctly physiological condition. Atresiæ of the Graafian follicles may occasionally occur in perfectly normal ovaries; the increase of the stroma is the most important occurrence. N. contends that no diseased condition of the ovary occurs which may rightly be termed "miliary cystic follicular degeneration," and states that when an ovary is found essentially enlarged with numerous tensely filled cysts from the size of a lentil to that of a bean, it will be more nearly correct to consider such as normal Graafian follicles in various phases of development; obliteration of the follicles of great extent follows as a sequela of chronic interstitial inflammation of old date, but this causes diminution in the number of the follicles, and could scarcely be confused with the above described condition. The formation of genuine cysts is accompanied by such striking alterations in the entire ovary, and the cysts themselves present such characteristic features, that they can also be readily distinguished from Graafian follicles. The most usual error is that of mistaking a beginning cystoma during two stages of its development: 1. Just at the beginning, when the depressions in the germinal epithelium agglutinate at any one spot, and isolated smalt cysts form close beneath the surface of the ovary as a result of stasis. 2. At a latter stage; when a large part of the ovarian tissue has been invaded by the epithelial new-formation, without there having occured the formation of large cavities. The microscopic examination will at once clear up the difference—the cavities of the suspected epithelial new-growths are lined with a new layer of cuboid cells provided at their free extermities with an opening or branchlets; they contain a thickly-fluid matter (colloid) and no definite walls, they are in frequent connection with one another, and form a network of epithelial canals which have no resemblance whatever to Graafian follicles.—*L. R. in Amer. Jour. Obs., etc.*

MEDICAL BULLETIN VISITING LIST. F. A. Davis, Publisher, Philadelphia. Penn. Price $1.25 to $1.75.

This visiting list contains the usual dosage, therapeutic, obstetric calculation and other information with places for various records of births, deaths, visits, nurses, confinements, engagements, etc., and is as well suited for its purpose as any I have seen.

MORTALITY STATISTICS OF MEMPHIS.—The rate per 1000 annually, from all causes, and special causes which are usually preventable, for month ending December 31, 1890.

Deaths under 5 years	Consumption	Lung Diseases, Acute	Diphtheria and Croup	Typhoid Fever	Malarial Fever	Scarlet Fever	Measles	Puerperal Diseases	Whooping-Cough	Accident	Deaths, White	Deaths, Colored	Total Deaths
26	12	19	7	4	—	—	—	—	1	9	50	54	104

Population, 62,000. Total annual rate per 1000, 20 14; Residents, 15,48.

WM. KRAUSS, M. D.,
Sec'y Board of Health.

PARTURITION.—"Dioviburnia," (Dios) given in teaspoonful doses every two hours after parturition will prevent convulsions, it controls hemorrhage and relieves after-pains. By its direct tonic action on the uterus, expels blood clots and closes the uterine sinuses, causing the womb to contract. In severe cases one oz, fluid Extract Ergot may be used in combination with two oz. "Dioviburnia." It is the experience of some of our most eminent Gynecologists in all cases where ergot is indicated, that its action is rendered much more effectual by combining it with "Dioviburnia" in the above proportions.

T. P. FORTUNE & Co. keeps the most complete stock of crutches and trusses in the city. They are agents for all the popular mineral waters.

KOCH'S TREATMENT—Experimental treatment of tubercular disease continues in Europe, and have been instituted in New York and other cities in the United States. We have, as yet, learned little of the curative qualities of the lymph, but its effects are being better understood. The secresy of its preparation still

maintains, and is, we think, unduly prolonged. A recent cable dispatch from Dr. Guiteras, of Philadelphia, now in Berlin, is thus summarized by the *University Medical Magazine*: "A greater degree of caution is being observed, especially as to the selection of cases of pulmonary phthisis subjected to the lymph treatment. The results, in this disease at least, are as yet inconclusive. Many cases are not decidedly improved. There is some risk of complication. Both pneumonia and meningitis have been observed. The general situation has been summoned up by stating that a spirit of caution prevails in Berlin today." One death has followed the treatment in this country.

THE old reliable sexton, Mr. P. M. Stanley, has associated with himself Mr. J. T. Hinton, who has been in the establishment in the capacity of embalmer for a long time. Mr. Hinton is a very popular gentleman, who understands his profession thoroughly, and we bespeak for the new firm an increase of their already large business.

CAMPHO-PHENIQUE is the ideal non-irritant antiseptic. It can be recommended in various forms of pruritus. Write for literature.

THOSE who have not used Hayden's Viburnum Compound should do so at first opportunity. See advertisement for indications.

The attention of our readers is called to the advertisement of Messrs. R. A. Robinson & Co., which appears in this issue. This house is one of long standing and enjoys a reputation of the highest character. The preparations referred to we commend specially to the notice of practitioners.

Memphis Journal of the Medical Sciences

MEMPHIS, TENN., FEBRUARY, 1891.

DEPARTMENT OF

PRACTICE OF MEDICINE & THERAPEUTICS

CONDUCTED BY

B. G. HENNING, M. D., AND S. A. ROGERS, M. D.

BIENNIAL REPORT OF MEMPHIS BOARD OF HEALTH.

Hon. W. D. Bethell, President, etc.:

DEAR SIR—The following is my report of office for the year ending December 31, 1890, made in accordance with the requirements of your ordinance. Accompanying this report will be found tabulated statements of the number of deaths, of the number of contagious diseases reported, of the expenses incurred by this department, with comparative tables taken from the reports of my predecessors in office, all of which have been carefully prepared and arranged by the Secretary of the Board, Dr. Krauss.

It will be seen that there has been a total of 1344 deaths, which exceeds the number for the previous year by twenty-two, yet falls short of any other year since 1882.

The census recently taken by the United States authorities included the residents of the newly-annexed districts, from which new territory records of deaths are wanting, because said annexation took place after one-quarter of a year had elapsed; and secondly, because said territory has never been formally acknowledged by your honorable body as a part of the Taxing District. We have, then, no authentic enumeration of the population within the city limits, and it would be manifestly unjust to compute our death rate on a population of 65,000, as shown by the official census.

In arriving at an estimate of the population of the present city limits, conference has been held with numerous prominent and well-informed citizens, and it has been agreed that 60,000 is a fair basis for calculation. With a population of 60,000 and a death list of 1344, we present a death rate of 22.4 per 1000. The number of white deaths for the year was 638, to a population of 33,000, representing a death rate of 19.33 per 1000, while the negro death rate reaches 26.14 per 1000. Negro population 27,000; deaths 706.

In presenting these figures I have endeavored to deal as fairly and approach as closely to facts as possible, and while it is believed that the above estimates are practically correct, it is regretted that an accurate official census is not at hand.

The number of cases of scarlet fever reported during the year was very much less than for previous year, with only one death. Diphtheria and typhoid fever both show increase in number of deaths; there was also a very marked increase in the extent to which these two diseases prevailed. It is true typhoid fever has prevailed during the year to an alarming extent throughout the district lying south and east of the city for a distance of thirty to forty miles. Nevertheless, I think its prevalence in Memphis may be fairly attributed, as likewise diphtheria, to the following sources:

1. The milk supply of the city—by reason of want of cleanliness in handling the milk, as well as adulteration.

2. The water supply of the city—contaminated in many instances by old filth-lined house-connection pipes—pipes which for years carried the famous Wolf River backwater conglomerate, the remains of which in these house-connection pipes impregnate and poison the otherwise healthful artesian water now being supplied our city. So likewise disease lurks in many leaky cisterns still in use.

3. Defective plumbing and ventilation so often found, especially in the closets and bath-rooms of the homes of the best citizens.

In view of the foregoing, I would recommend among the sanitary safeguards to be adopted the appointment of an Inspector of Milk and the Sources of Milk Supply, clothed with such authority as will enable him to secure cleanliness in the

handling and purity of the quality of the milk, even back to the health and healthful surroundings of the cow.

This occasion is taken to endorse the thorough and efficient carrying out of the duties of office by the inspector of plumbing, Wm. Lunn. With the same care that has been evinced during the past year continued, and with the amended ordinances on plumbing, sewer connections, ventilation of water closets, etc., we can at least recommend all of our new buildings as healthful dwelling places.

The books of the City Engineer show the important fact worthy of mention here, that during the past year 14,906 lineal feet of sewer pipe were laid against 6233 feet of the previous year, and 1950 house connections made against 185 house connections for 1889. The total expense of this work was about the same this year as for 1889, although double the lineal pipe was put in service and ten times as many house connections were made. There are yet many unsewered corners and strips, as well as well-known broad areas unaccommodated with sewers, from which portions of our city night soil is being constantly carted, much to the disgust of our citizens.

I must call your attention to the garbage service, as well as the cost at which it is maintained. The stock, consisting of mules and horses, are for the most part aged, and so worn with long service that they are unequal to a full day's work, and should be replaced by new animals. The expense account shows that the cost of maintenance of this service is about $20,000. It is a too well known fact that the present number of carts is hardly equal to one-half the demand made upon them. Our city has grown, is growing, and to carry out the objects of this department, to keep the premises of our citizens clean of refuse matter, this service must be doubled and carried on at more than double the above-named running expenses. It then becomes a question for this Council to determine which will be the better—render better service at the lesser expense, the present system enlarged, or that of districting the city and letting the work by contract.

The following recommendations are made with the hope of their being early adopted:

1. That the city dispensary be removed to a more central location.

2. That the State Legislature be memorialized with a view to securing the passage of a law requiring the registering of all births, making it a duty of both parents and attendants to see that prompt reports are made. Such a law would materially aid in collecting vital statistics of the city.

3. With the hope of securing the full co-operation of the patrol force, it is recommended that an ordinance be passed which will enable the Board of Health to secure the suspension of any policeman who willfully or through neglect fails to note violations of health ordinances and to arrest the offenders.

4. That the present hospital accommodations be burned to the ground, and then the proper steps taken to secure the erection of a hospital equipped for *charitable* treatment of the sick. As the hospital now stands with the parsimonious supply of money for its expenses, there is no greater blot on the name of the otherwise charitable and generous city of Memphis. Properly constructed and equipped, the death rate of the institution would diminish at least 20 per cent.

Lastly, but surely of greatest importance, it is suggested that the sanitary fund be increased. The amount for the past year fell so far short of the wants of the department that some of our most important work had to be given up just while we were in the midst of it. Such a condition of finance so cripples the department that all pride of office utterly fails.

In entering upon my duties of office nearly one year ago, my first step was a searching of the ordinances for limitations of the powers of the Board, and finding there authority for condemning and removing unsanitary habitations, I at once proceeded with all the force at my command to condemn the numerous decaying rookeries in which were cuddled hundreds of human beings, reveling in filth and breathing most unwholesome atmospheres.

In the course of six weeks several hundred notices were served on owners of these buildings to "tear down or reconstruct in accordance with the Taxing District ordinances." Great care was taken that the details of this process of con-

demning were carried out to the letter of the law. The sanction and support given the Board of Health by your honorable body did much to advance the measure, and at the end of two months over 140 houses had been vacated and torn down and 200 more were undergoing repairs. The good work then being rapidly pressed onward was brought to an untimely halt by steps taken through the United States Court by one of our citizens, and whose example was not long in being imitated.

The history of these proceedings is familiar to every citizen and need not be further dwelt upon. While much regret has been expressed everywhere that this work of destroying disease-breeding habitations has been discontinued pending an appeal to a higher court, there is some satisfaction in feeling that upward of 1000 human beings were forced to change dwelling places, or else improve them, under your ordinances. There is not a more important sanitary step that I could suggest than the destruction of these buildings, and it is sincerely hoped that the higher court will sustain the ground taken by this Board as to its power to declare against and destroy as nuisances such buildings.

My next step was directed against house owners who had failed to make sewer connections, and under a house-to-house inspection those derelict in this matter were detected and proper legal steps taken, resulting in the making of many sewer connections to lines then in existence.

I regret to say that the Circuit Court failed to sustain this Board in enforcing the ordinance which requires every water-closet to have connections with the water supply company for flushing the hopper. Expert plumbers and sanitary inspectors testify to the total inefficiency of flushing by means of water poured from a bucket. And again, it is humiliating to confess that even our City Court fails to appreciate the necessity for punishing the violators of the sanitary code.

Restrained by the Federal, enjoined from further action by the Circuit, and discouraged by the Recorder's Court, there is left as an apology to the public for not carrying out the sanitary work boldly begun, a want of power and a want of funds.

Death Rate Per Thousand Population.

Estimated population, 60,000; White, 33,000; Colored, 27,000.
Total deaths, 1344.

Deaths		Ratio to 1000 Population		Ratio to 1000 Population	Ratio based on Board of Health Census of 1888; 1500 added for increased population: 57,494; White, 31,197; Colored, 25,867.				
White	Colored	White	Colored	White and Colored	Died White	Died Colored	Ratio White	Ratio Colored	White and Colored
638	706	19.33	26.15	22.40	657	665	21.10	25.77	23.29

Respectfully, W. B. ROGERS, M.D.,
President Board of Health.

THE KOCH TREATMENT.

Tr. from Therapeutisch Monatshefte, Berl. Klin. Wochens. Deut. Med. Woch., Wiener Med. Presse, &c.

BY WM. KRAUSS, M.D., MEMPHIS, TENN.

The literature on this subject is becoming so voluminous that it will perhaps be of general interest to simply enumerate some authorities and their opinions. The observation of all is in the main the same as Koch's:

Watson Cheyne and Dr. Heron (London) have as yet no cures to record. The diagnostic value of the lymph is very great. Have used it in a great variety of tubercular diseases.

Dr. Kromeyer (Halle) says: It can only act where a vascular connective tissue nourishes the tubercle. Thinks the remedy dangerous in extensive tuberculosis of lungs.

Prof. Kohler (Vienna) treated 19 cases, 60 injections in all. Diagnostic value great. No cures as yet. Decided improvement in some.

Prof. Oppenheimer (Heidelberg), one case tubercular larynx. Rapid recovery after 3 injections.

Prof. Rosenbach (Breslau), 56 cases. All varieties of tubercle, but phthisical subjects only in earliest stages. Confines his report principally to mode of using and nature of reaction.

Prof. Henoch (Berlin) treated 11 children. Is against using the remedy on out-patients. One case was tubercular menin-

gitis, child in hopeless condition; 4 injections with moderate reaction; death. Virchow's autopsy shows a greater hyperæmia of meninges than that scientist had ever seen before. Henoch says he will never again use it in tubercular meningitis. Another case was tubercular peritonitis. Evacuation of 4 pints of fluid, containing leucocytes, but *no bacilli.* There was also caries of left petrous bone; trephined, and tubercular granulations found. Injections began with $\frac{1}{10}$ milligramme; 3 injections given in all in course of a week, the last being 1 milligramme. Believes patient to be recovering.

Prof. Senator (Berlin), 53 cases; 400 injections. Tuberculosis of closed cavities offers the most unfavorable conditions; in tuberculosis of cranial cavity, injections positively contraindicated. Other contraindications are: great pleural effusions, nephritis, advanced marasmus, cachexia, amyloid degeneration, &c.

Dr. v. Nooden (Prof. Gerhardt's Clinic, Berlin), "resolution of lung consolidation produced by the remedy goes on rapidly, even during subsequent injections." "The transient consolidations very probably usher in the healing process."

Dr. Hofmeier's (Berlin) report includes two pregnant women in whom the remedy was without deleterious effect. Fœtal pulse was hastened after reaction for a short period.

Prof. Guttmann (Berlin), 109 well-selected cases of phthisis Result: Improvement in all; marked improvement in some. Believes early stages can be cured. The longest time of observation at his hospital is 27 days. Bacilli disappeared in many cases. "Initial cases we believe to be curable in a short time." Guttmann lays great stress on selection of cases and method of using.

Prof. Frankel (Berlin) believes it to be a "cure."

Prof. Leyden (Berlin), third report; 46 cases; 136 injections. No new principles to advance. Says that it must be admitted that lupus and laryngeal tuberculosis can be cured. Thinks Koch lymph is a specific, which will increase number of cures very materially.

The sense of the Berlin Dermatological Society seems to be, that even in cases longest under observation no cure has resulted. The diagnostic value of the lymph is very great.

DEPARTMENT OF

GENERAL SURGERY.

CONDUCTED BY

W. B. ROGERS, M. D.

SOME IMPORTANT POINTS REGARDING THE APPENDIX VERMIFORMIS.

JOHN FERGUSON, M.A., M.D., L.R.C.P., EDIN., ETC.

The following observations have been made during the past eight years, and cover a total of two hundred dissections, carefully performed for the purpose of elucidating certain points regarding this small and apparently unimportant bit of the human body.

The average length of the two hundred appendices was four and one-half inches; and the average diameter that of a No. 9 catheter, English scale. In three cases the appendices were only half an inch in length, while in only one case could it be said that it was entirely absent.

Of the entire two hundred examples the appendix was supplied with a mesentery of its own, and so placed that its perforation would open directly into the peritoneal cavity, in one hundred and twenty-three. Of these one hundred and twenty-three the appendix lay to the right of the cæcum in nineteen, descended downward in eleven, lay inward from the cæcum in eighteen, and behind the cæcum in the remaining seventy-five.

The other group of seventy-seven cases was specially interesting, in the fact that the appendix was so placed and covered by peritoneum that its perforation would open into the subperitoneal tissue, and establish a diffuse form of cellulitis. In these cases the most likely course for the pus to pursue would be downward, and finally to present itself in the situation of a psoas abscess. One case is of great interest. A man of about forty, who had a discharging sinus in the above situation, died of an acute attack of pneumonia. A soft catheter could be passed up this sinus a distance of ten or

eleven inches. On making a careful dissection of the sinus, it was traced to a perforated appendix, that lay behind the peritoneum in the position of the above seventy-seven. In reality this case was an example of a fæcal fistula.

Out of the two hundred cases examined there was evidence of old-standing lesions and perforations in seven. In three of these latter the proof, that at some prior date there had been a perforation, was quite positive.

Foreign bodies were found in fifteen of the two hundred. There were enteroliths in two; a small stone in one; a small bone in one; a piece of a screw nail in one, and such articles as orange-pips, cherry-stones, etc., in the other ten.

The above remarks are of some importance in showing that of the two hundred appendices, there were foreign bodies in fifteen, and that there were good signs of lesions in seven, three clearly having been of the character of a perforative appendicitis. This is very important, as pointing to the possibility of recovery after such a lesion of the appendix.—*Am. Jour. Med. Sciences.*

STATISTICS ON CONGENITAL DISLOCATIONS.

Dr. Matt. DePass, House Surgeon to Hospital for Ruptured and Crippled, New York City, makes the following interesting report, taken from the records of the Out-Patient Department of said institution:

During the past 20 years 225 cases of congenital dislocations at the hip joints have been recorded; 179 females, 46 males.

Of the 179 females both hips were found dislocated in 53 cases, the right in 48 cases, and the left in 78 cases.

Of the 46 males both hips were found dislocated in 18 cases, the right in 10 cases, and the left in 18 cases.

There were also 15 cases of congenital dislocation of other joints: Both shoulders, 1 case; right shoulder, 5 cases; left shoulder, 2 cases; both knees, 1 case; right knee, 1 case; right wrist, 1 case; left wrist, 1 case; both patellæ, 1 case; right scapula, 1 case; right clavicle, distal extremity, 1 case.

SURGICAL CLINIC.

Perineal Section for Traumatic Rupture of Urethra—Aneurism of Femoral Artery, Ligature—Ventral Hernia—Phimosis—Circumcision—Ankylosis of Jaw.

W. B. ROGERS, M.D.
Professor Surgery and Clinical Surgery, Memphis Hospital Medical College.

Reported by I. H. Edgington.

Case I. Ruptured urethra. W. W., male, 11 years of age, white, fell astride a thin board, forming the side of a wagon bed, forty-four hours previous to presentation to the class. Since the fall he had not been able to pass any urine, and the bladder was plainly perceptible through the anterior abdominal walls, distended, and reaching quite to the umbilicus. Great pain was complained of, and the lightest percussion tap caused an outcry from the patient. The perineum was found discolored and very full, red and tender, the integument extending along the right of the scrotum, up to and above the right pubic bone, onto the abdomen—was red, tender and swollen. The swelling included, not only the skin, but the cellular tissue, and presented all the evidences of cellulitis. Pulse, 140; temperature, 101½.

The tissues in the perineum were boggy. A catheter was passed, and bloody urine began escaping. The diagnosis of ruptured urethra was made, and after the bladder was half relieved of its contents a staff was introduced, and a median perineal incision made down to the urethra, the floor of which was found torn in the long axis. Between the skin and urethra was found urine and blood mixed; this, with a quantity of gas, the result of decomposition, escaped. The remainder of the urine was evacuated, and the bladder thoroughly irrigated with hot water. There was found a pouch on the right side along the groove between the scrotum and thigh, reaching to one inch above the pubis; this pouch contained urine, undergoing decomposition; was thoroughly irrigated and packed with gauze, and patient sent to bed.

Case II. Femoral aneurism. G. B., male, black, 23 years, brought over from Arkansas, presented a pulsating tumor

on front of left thigh, just where the femoral artery passes under the sartorius muscle. The tumor was in the line of the known course of a large artery, pulsated distinctly with each heart beat, gave forth the peculiar rasping "bruit" on auscultation and on palpation; the pulsation was distensile. The diagnosis of aneurism, an abnormal sac containing blood and communicating with an artery, was made. Just at inner aspect of the tumor, were the signs of a recent wound—that made by a pistol ball, accidentally fired, five days previous. A traumatic aneurism. The entire thigh was immensely swollen, pitted on pressure everywhere, even to just above Poupart's ligament. Temperature 101, pulse 130; prognosis unfavorable.

Operation. Esmarch bandage applied to the leg, and rubber tourniquet above the tumor six inches. The tumor was laid open, and about four ounces of blood escaped. A well-defined sac had formed of lamined fibrin; communicating with this sac, was found the femoral artery which had been cut on the outer side by the pistol ball; an opening in the side of the vessel larger than the calibre of the vessel. A ligature was applied both above and below the wound in artery, and tourniquet removed. The ball could not be found, although its track was readily followed by probe, six inches, upward and backward toward the buttocks. It was not deemed advisable to prolong the search, as no pus was present; but the enlargement of the limb was due to effused blood, which had burrowed between the various muscles throughout the thigh. The patient was sent to bed and a still further unfavorable prognosis given. The danger of sepsis from breaking down of this effused blood was dwelt upon. Amputation was not done because the shock, it was believed, would kill the patient.

[The case did badly; pulse continued above 130, temperature 101; great restlessness and pain. Died 60 hours after ligature. The limb retained its warmth to the last, and no suppuration was seen at the wound.]

Case III. Ventral hernia. Henry L., 59 years, male, white, presented a tumor on left side, just above crest of ilium, size of fœtal head. The tumor was painless, resonant on percus-

sion, and easily reduced when patient was placed in recumbent position. The edges of the ring in the abdominal wall were clearly felt and examined by ten of the class. The case illustrated ventral hernia. In this instance the man had received a cut at the site of the hernia years ago. It was explained that the size of the opening, together with the length of time of its existence, fifteen years, the age of the patient, all precluded any hope of benefit from any operation.

Case IV. Circumcision. Adherent prepuce; child, 2 years old; constant priapism; pain in urinating; prepuce quite redundant, and adherent to glans. Circumcision was done, and the membrane and skin carefully stitched all around with continuous catgut suture.

Case V. Ankylosis of the jaw. C. L., 9 years, male, white, was presented. There existed a total inability to separate the teeth of the two jaws, and all food taken in was of necessity liquid. Slight lateral motion was obtainable, which showed the fixation was not connected with the articulation itself. On the left side, in the soft tissues of the buccinator muscle, was felt a broad, thick, fibrous band, wholly unyielding. This band was the result of the healing after a slough following a spell of fever, and was in part ascribed to the use of calomel. Several teeth on left lower jaw were loose and decayed. The odor from the buccal cavity was intolerably bad.

It was explained that the causes of ankylosis in some instances were within the joint, the result of previous inflammatory processes, arthritis in some form—while in others the cause lies wholly without the articulation, in tendons, muscles, fascia or skin:—intra-articular and extra-articular ankylosis. Again it was explained that the loss of motion might be complete or incomplete. Bony ankylosis—due to fusion of the bones, union by new-formed cancellous bone—was complete; while ligamentous and fibrous ankylosis usually admitted of motion, in some cases, though, very limited motion. Fibrous ankylosis could ofttimes be broken up and the function of the joint restored to a greater or less degree; but bony ankylosis had best be left alone, as a rule, and the deformity, if such exist, corrected by osteotomy.

In this especial case before the class, there existed a very slight degree of mobility, as shown by the patient being able to slightly separate the teeth seen on close inspection. There was no history of arthritis, and on the other hand there could be felt a strong fibrous band on inner side of left cheek, a cicatricial band following the healing of the ulcer. The indications were to cut this band and keep the jaws widely separated until the breach was filled.

Operation. The patient was anesthetized and the band severed; the lower jaw was then pried down, until a space of one and a quarter inches existed between the upper and lower incisions. The alveolus on the left lower jaw was necrosed for distance of two inches. This was removed. Necrosis of left upper alveolar process less extensive and firmly attached, was not removed. Patient came from under anesthesia and readily opened his mouth.

It was explained that on the following day a wedge-shaped rubber pad would be placed between the teeth and kept there until the healing process was finished.

ANNALS OF SURGERY.—This journal comes to our table each month replete with practical and classical reading matter. There is no journal in our estimation, from a surgical standpoint, equal to it, and we bespeak an acquaintance to those not yet familiar with its worth. The December number contains a most excellent paper on wiring the patella by Dr. L. S. Pilcher. Dr. H. O. Marcy ably discusses where and when to use drain tubes. Both of these papers should be read by every practical surgeon.

The usefulness of good Hypophosphites in pulmonary and strumous affections is generally agreed upon by the profession. We commend to the notice of our readers the advertisement in this number. "Robinson's Hypophosphites" is an elegant and uniformly active preparation; the presence in it of quinine, strychnine, iron, etc., adding highly to its tonic value.

DEPARTMENT OF

GYNECOLOGY.

CONDUCTED BY

T. J. CROFFORD, M. D.

MINOR UTERINE SURGERY.

A Paper read before the Philadelphia Obstetrical Society, December 4, 1890.

BY CHAS. P. NOBLE, M.D.

For several years the attention of gynecologists has been so largely occupied with abdominal surgery, and particularly with the diseases of the Fallopian tubes, that but little has been said concerning the diseases peculiar to the uterus. It may be supposed by some that the reason so little has been heard of the uterus and its diseases is that the labors of the past have placed our knowledge of these subjects upon an enduring basis. I am satisfied, however, that the true reason has been indicated above, and am the more convinced of it by the recent appearance of a paper absolutely denying the truth of the teachings of the past, concerning, more especially, the treatment of diseases of the uterus, and attributing evils to the measures employed greater than the good they have been designed to accomplish. In view of the immense strides which have been made in our appreciation of the diseases of women, especially those of an inflammatory character, in the last ten years, and of the very different light in which diseases of the uterus now appear as contrasted with former years, it has seemed to me that it will be profitable to review the subject at this time. The ground to be covered is so considerable that I shall present my views concisely and of necessity somewhat dogmatically, so as not to consume your time unduly. Presented in this way, I hope the subject will elicit full discussion, as I consider it one of the most important and suggestive in gynecology.

Before treating of the individual diseases of the uterus requiring surgery, it will be well to consider the diseases of

the uterus as a whole. It cannot be too strongly insisted upon that a very sharp distinction should be made between diseases of the uterus themselves and diseases of the uterus complicating, or complicated by, diseases of the uterine appendages. This is the key to the situation, and upon a right appreciation of this fact depends success or failure, or even disaster, in the management of this class of cases. Uncomplicated disease of the uterus, barring neoplasms, seldom or never threaten life, and belong to the minor ailments of women. Where the uterine malady is complicated by inflammation of the uterine appendages, the conditions are essentially different. The disease of the appendages overshadows the disease of the uterus, which must be nearly or quite disregarded. For were it possible to cure the uterine malady without modifying the disease of the ovaries or Fallopian tubes, little would be accomplished, as the more serious disease would remain. But this is not all, for experience has amply shown that to tamper with the uterus, particularly by operation or by intra-uterine applications, in the presence of complicating tubo-ovarian inflammation, is a most dangerous thing, liable to set up acute pelvic or general peritonitis. Hence it should be laid down as a rule that operation upon or manipulation of the uterus is contraindicated in all cases in which tubo-ovarian inflammation exists. The contraindication becomes the more absolute the greater the gravity of the complicating disease of the appendages.

The experience of the past has shown the truth of the foregoing statements, and the knowledge of the present concerning the nature of pelvic inflammation has rendered the whole subject easy of comprehension. Formerly, various explanations were offered, some of them quite fantastic, as to the occurrence of pelvic inflammation following manipulation of or operation upon the uterus when "fixed," or in the presence of "cellulitis" or of "thickening." Now we know it is due to the rupture of intra-peritoneal adhesions and the escape of septic material from the diseased appendages.

The Uterine Sound. I have but little to say in commendation of the uterine sound. Unquestionably, it does far more harm than good as used today. I believe that its field of usefulness is very limited. For the purposes for which the sound

is ordinarily used, it is an unnecessary instrument. Bimanual examination teaches the size, shape, position and mobility of the uterus far more accurately than the sound, and without injury to the patient. The textbooks say that the use of the sound should be preceded by bimanual examination to determine the above questions and the presence or absence of pelvic inflammation. If this be so, and the facts be determined, what is to be gained by the use of the sound? More or less uterine colic, and perhaps an acute salpingitis, when a dirty sound has been passed into a healthy uterus, or a clean sound passed with some force into a uterus in the presence of tubal inflammation. Unquestionably, the use of the sound has no place in the determination of the foregoing facts concerning the uterus. Likewise, I would condemn the use of the sound as a uterine repositor. Mobile uteri can be reposited by Schultze's method, and fixed uteri should be left alone. The sound is useful in determining the potency of the uterine canal when this is in doubt; and may be useful in the differential diagnosis of obscure morbid conditions in the pelvis, but I am convinced that the facts apparently determined by its use are often illusory, and that the practitioner who least relies upon it will make fewest mistakes in diagnosis. The sound may be used to determine the presence of fungosities within the uterus; but the history of uterine hemorrhages and leucorrhea, with the absence of disease outside the uterus, makes the diagnosis so certain as to obviate the necessity for its use. The diagnosis and cure can be made with the curette.

Intra-uterine Medication. I feel convinced that intra-uterine medication has been much abused, and that the cases are extremely rare which require or are benefited by the application of a medicament within the internal *os uteri*. Intra-uterine applications have been recommended for chronic endometritis and chronic metritis. When uterine leucorrhea established the diagnosis of endometritis, and the same, with enlargement and tenderness of the uterus, not due to subinvolution or neoplasms, established the diagnosis of chronic metritis, these diseases were said to be very common—indeed, the most frequent diseases of women. Hence intra-uterine medication became a routine practice. If I am to judge from my own

experience, uncomplicated chronic endometritis and metritis are not frequently met with. As an illustration, by going over a hundred cases in my case book and selecting uncomplicated cases, I find seven. If the cases of laceration of the cervix, with erosion, etc., were added, the list would be considerably increased. But in by far the largest number of cases these morbid conditions exist in relation with inflammatory affections of the uterine appendages, preceding and causing the tubo-ovarian disease, and later being kept up by it.

In the presence of tubo-ovarian inflammation it is now generally accepted that intra-uterine applications should not be made. They can do no good, and may do great harm. Fungoid endometritis and septic endometritis following incomplete abortion, require the curette. Excluding the foregoing, and cases of endometritis and metritis complicating laceration of the cervix, few cases remain for intra-uterine medication. And I am far from convinced that this small class cannot be more efficiently treated and more quickly cured by the dilatation of the cervix under anesthesia with thorough curetting of the uterine canal with the sharp curette. During the past year I have thought it advisable to make applications to the whole uterine canal in three cases. One, a case of chronic endometritis in a virgin, was cured. The second, also a case of chronic endometritis in a woman the victim of syphilis years before, was improved by intra-uterine medication, and was cured when mercury and iodide of potassium were given by the mouth, in addition. The third, a case of small fibroid tumor, with menorrhagia, was made distinctly worse.

Looking back over my past results, I feel less and less inclined to make intra-uterine applications. Formerly I made applications of Churchill's tincture of iodine, and solutions of nitrate of silver to the endometrium almost daily. Before I appreciated the dangers of the practice and its contraindications, salpingitis and peritonitis were "lighted up" in a number of cases. Fortunately, no deaths resulted. Since I have abandoned the routine use of intra-uterine medication in disease of the pelvic organs accompanied by uterine leucorrhea, my patients have been far happier (as uterine colic is only a

memory), and I am satisfied that the influence of treatment has been more favorable than in former years.

Dilatation of the Cervix. Dilatation of the cervix is advised for the cure of obstructive dysmenorrhea and sterility due to flexions of the uterus (usually so-called congenital anteflexion), or to stenosis of the cervical canal, congenital or acquired; also as a step in the removal of polypi, small fibroid tumors, and the retained products of pregnancy, and as a preliminary to the use of the curette. In selected cases I am heartily in accord with this advice. It is not possible to discuss these questions now; but the important thing is that cases of uterine disease are to be selected for dilatation, and not cases of tubo-ovarian inflammation. In such cases, when done with full antiseptic precautions under anesthesia, dilatation of the uterus is practically without danger, immediate or remote, and has given very satisfactory results in my hands.

The mistake of regarding cases of so-called acquired anteflexion, due to peritoneal adhesions or shortening of the utero-sacral ligaments, as cases of uterine disease, is particularly to be guarded against. The folly of expecting to benefit inflammation of the peritoneum or of the uterine appendages by dilating the cervix is apparent; and I am convinced that all the disasters following dilatation of the cervix are to be attributed either to this error in practice or to poor antisepsis.

Rapid dilatation with the steel dilators has always been employed, the pattern of Goodell having been commonly used. I have never seen a tent introduced into the cervical canal; nor have I seen the hard rubber dilator used.

The Curette. The uterine curette is a most valuable instrument, and is indispensable in the treatment of uterine fungosities and for the removal of the diseased endometrium in certain cases of menorrhagia. I believe it capable of rendering good service in the treatment of certain cases of congestive and obstructive dysmenorrhea—in which the seat of pain is in the uterus, and the cause, morbid processes taking place therein—by removing the endometrium, particularly near the internal os. After incomplete miscarriages, and in septic puerperal endometritis, the curette is useful to remove necrotic tissue; but in these cases its use should be preceded by

the finger, used as a curette, by which alone can the state of the uterine cavity be determined. In such cases the finger is the best curette. In all cases I precede the curetting with dilatation of the cervix, and follow it with the intra-uterine douche and intra-uterine iodoform gauze packing, which acts as a capillary drain.

In cases of chronic endometritis without complication, dilatation and curetting will either effect a cure or greatly facilitate subsequent intra-uterine medication.

In curetting full antisepsis should be maintained, and the same care be used to select uncomplicated uterine cases. Anesthesia is essential to thoroughness. The curettes of Martin and Schroeder have been used. The dull curette should be regarded more as an instrument of diagnosis. It is useful in cleaning the uterine cavity of debris before using the douche. It also finds a place in puerperal septic endometritis.

Laceration of the Cervix. Probably no subject in gynecology has excited more discussion than that of the pathological importance and the treatment of laceration of the cervix. I am in accord with those who regard laceration of the cervix as a lesion of importance in the causation of pelvic disease, and the operation devised by Emmet for its repair as a useful addition to surgery. Certainly many lacerations of the cervix, occurring during labor, heal spontaneously during the lying-in, and are of no practical consequence to the puerpera; others heal more or less perfectly, and involution of the uterus taking place fully, no ill consequences follow. But the history of laceration of the cervix in many cases is very different. The laceration does not heal, the cervix gapes open, involution of the pelvic organs does not take place, pelvic congestion is kept up, and uterine catarrh and menorrhagia follow. The general health is more or less affected, depending upon the vigor of the particular constitution, and the duration of the local disease. In some cases extensive reflexes are developed; but the conservative man will ever bear in mind the possibility of overlooking neurasthenia and hysteria in this class of cases.

Local and general treatment will effect a cure in many of these cases without operation. Rest, tonics, regulation of the

bowels, ergot, hot water, vaginal douches, the application of glycerine tampons, painting the cervix with Churchill's tincture of iodine, together with scarification of the cervix, will frequently improve the condition so markedly as to effect, practically, a cure. But often this treatment proves ineffectual and operation is necessary. Another indication for trachelorraphy is the existence of laceration of the cervix as a complication of retroversion or retroflexion of the uterus. Not infrequently the malposition cannot be corrected until the intra-vaginal cervix is restored by operation. It is important that endometritis, existing as a consequence or as a complication, should be cured before closing the laceration. Where this is difficult or impossible, and in all cases in which uterine hemorrhage is a feature, the trachelorraphy should be preceded by dilatation of the cervix and curetting of the uterus. Trachelorraphy done under these conditions has given very satisfactory results in my hands. When done for supposed reflex effects, due to cicatricial tissue, the outlook is not so promising.

It will be observed that the operation has been recommended only for uterine disease. When the uterine diseases exist in connection with inflammatory disease of the appendages the operation is contraindicated. Under these circumstances, there is great danger of causing acute peritonitis; or this failing, drainage from the uterus is interfered with and subsequent acute attacks of salpingitis promoted. In a neglect of this contraindication lies most of the dangers and disappointments of trachelorraphy.

The relation of laceration of the cervix to tubal disease is a subject worthy of careful study. That laceration of the cervix is a frequent cause of subinvolution of the uterus and endometritis is generally believed. That endometritis causes salpingitis by extension is also true. Hence it appears probable that laceration of the cervix sustains an important relation to salpingitis as one of its predisposing causes. The relation between laceration of the cervix and cancer also is probably more than accidental. These considerations are further inducements to repair all lacerations of the cervix which are causing active symptoms.

I believe that trachelorraphy, done under the conditions laid down, is a perfectly safe, and very valuable operation; and that the present tendency to decry its usefulness arises from a failure to observe its proper indications; or to carry out the principles laid down by its inventor for the operation itself. Of lateral and posterior incision of the cervix I shall say but little. I believe that the field of usefulness of these operations is limited, but that in exceptional cases they may be valuable.

I hope I have made it clear that my own experience has made me a firm believer in the value of minor uterine surgery for uterine disease. It seems equally clear to me that the cause of disappointment in the past when it has been met has been a failure to properly study the cases; and thus uterine surgery has been employed for other than uterine disease. Also that the disasters of uterine surgery have been due to insufficient antisepsis; or to the fact that operation has been done in the presence of disease of the uterine appendages, more especially pyosalpinx and abscess of the ovary.

When it was believed that inflammation of the appendages was cellulitis, which was caused by, and kept up by, disease of the uterus, and only to be cured by curing the uterine malady, it was perfectly logical to attack the uterus with our therapeutic resources. But experience has shown the dangers as well as the futility of this method, and modern pathology has brushed away the apparently rational basis upon which it rested. It is upon this ground that I have opposed useless and dangerous uterine treatment in complicated cases of pelvic disease.

Ovarian Tumors.—Dr. Tuholske presented two specimens of ovarian tumors which he had removed. They both had twisted pedicles, and were the only two of all removed, where he was certain of this point. One of the pedicles of these tumors was twisted one and one-half, and the other two and one-half times upon itself. When first seen one of the tumors was causing no trouble, and as the weather was excessively hot the operation was delayed, but the tumor grew rapidly and caused the patient, in a short time, so much pain that the operation could not be further postponed. Adhesions were found high up on the omentum, were firm, and could not have been formed after the pains had begun. The points of interest were, why were there adhesions? why were they found only high up? why did the twisting take place, and what causes produced it?—*St. Louis Courier of Medicine.*

DEPARTMENT OF

DISEASES OF THE EYE AND EAR.

CONDUCTED BY

JAMES L. MINOR, M. D.

EXPERIENCES WITH PYOKTANIN IN OPHTHALMOLOGICAL AND OTOLOGICAL PRACTICE.

Read before the St. Louis Medical Society, October 11, 1890.

BY ADOLF ALT, M.D.

After having carefully perused a paper by Prof. J. Stilling of Strasburg on "The Aniline Colors as Disinfectants," which was published in the April number of the *Archives d'Ophtalmologie*, I felt that Stilling's name might be a warrant for the correctness of the statements therein contained. I was certainly struck with the carefulness with which the exhaustive experiments seemed to have been made, and with the rationality of the deductions derived therefrom, and I felt that it was my duty to give my patients the benefit of his labors as soon as possible. Since June I have used it daily in my practice. I used exclusively the methyl violet, as sold by Merck, chemically pure, under the name of pyoktanin, and I did so according to Stilling's recommendation in solutions of 1 in 2000, 1500 and 1000; and in the shape of a pencil.

The main qualities of this remedy as claimed by Stilling are, that it is non-poisonous; that after having rendered a wound aseptic, it will keep on doing so for a prolonged period; that it will be taken up by the tissues and be carried into their depth. The microbes which it destroys, *par excellence*, according to Stilling, are the pyogenous ones. He found that a solution of 1 in 64,000 even would arrest their growth, while one of 1 in 2000 would absolutely destroy their vitality.

Purulent processes, then, were the ones in which to try its efficacy first. At the time when I received the remedy I was treating several cases of corneal ulceration on which I tried it at once, and I will state right here that I was greatly disappointed. In one case, in spite of the application of the pyoktanin pencil to the fundus of the ulcer, and later on of

repeated instillations of a 1 in 2000 solution, the ulcer grew larger and larger. Finally, being convinced that I was losing ground as well as time, I gave up the pyoktanin and treated the case without it, and with much better effect. In some other cases of corneal ulceration pyoktanin did no better, perhaps no worse, than other methods of treatment. In one case of abscess of the cornea after a slight injury, the whole cornea was destroyed in a shorter period than, I think, I have ever seen it before. All of these patients, and a number of other ones treated with pyoktanin, stated that they "felt" considerably better after the instillation. Pyoktanin, therefore, seems to have a certain amount of analgesic power.

Contrary to J. Stilling's invariable experience, I never saw the contents of the anterior chamber and the iris become blue after the instillation of pyoktanin into the conjunctival sac, although the external surface was deeply stained. Even the deepest staining had almost totally disappeared after twenty-four hours.

In a case of furuncle near the outer canthus, and a case of purulent dakryocystitis, pyoktanin acted well.

The best results in purulent affections I have, however, seen in cases of purulent otitis media, with or without polypoid formations. Having cleansed the ear carefully with cotton, I instill three or four drops of the pyoktanin solution. Even after one such treatment the character of the discharge is altered. From muco-pus or pus it is changed to almost simply glassy mucus. In old cases the disagreeable smell disappears, and where pain exists the instillations seem to greatly modify it. Granulations, and even larger polypoid formations undoubtedly are materially influenced by pyoktanin. They shrink rapidly, especially at first. In acute and subacute otitis media purulenta, I have seen the discharge disappear after one or two instillations, and while in some cases it would, later on, reappear, in others it staid away as long as they were under observation.

I suppose the good results in these cases were largely due to the fact that the pyoktanin remained constantly in contact with the diseased surface, and when being dissolved by new discharge at once acted upon it as a disinfectant.

In a few cases of furunculosis of the external meatus its action was very beneficial.

I tried pyoktanin, further on, in a considerable number of cases of parenchymatous keratitis. All of them felt better—but with the exception of one case in a child, none made any remarkable progress.

In several cases of marginal blepharitis and phlyctænular keratitis I obtained no favorable results whatever.

In a case of very severe syphilitic iritis with gummata, the influence of one or two daily instillations seemed to be beneficial—certainly, the patient was every time relieved from his pain.

In several cases of mere superficial injuries to the eye which I saw soon after the accident, pyoktanin seemed to act as well as could be wished for. In injuries involving the deeper parts of the eye, it did no more good than other antiseptics.

I especially mention all these cases, since Stilling had stated that his results in similar cases had been remarkably excellent. The power of penetrating into the depth of the tissues, and there, so to speak, to hunt for the microbes and to kill them, which Stilling considered as one of the chief characteristics of the aniline colors, I have, I am sorry to say, not been able to verify.

I have used it, furthermore, in a comparatively large number of eye operations. Here it has done well—or at least no infection took place—but the same result has been reached by other antiseptics, and even before we had them. After this statement I have to mention one case in which enucleation of an eyeball was followed by erysipelas in spite of pyoktanin and other disinfectants. Silk sutures disinfected with pyoktanin have done decidedly better than with other disinfectants, so that I have been enabled to leave them *in situ* much longer without the least pus formation, or even redness around them, than with any other antiseptic remedy.

In a second paper, in which Stilling tries to save his child from being too early choked to death by adverse reports, he still maintains his first statements, but he now recommends the remedy in much more concentrated forms. These I have not tried, because even a solution of 1 to 1000 was very disa-

greeably felt in the eye, and in one case caused excessive pain.

To sum up my experience to date, I may say that in ophthalmic practice my results do not show that pyoktanin is any better than, or, perhaps, even as good as the bichloride of mercury, and it is, moreover, a somewhat disagreeable thing to handle on account of the staining.

I find it to act very well in purulent otitis media, and furunculosis of the external auditory canal.

It is probably as good an antiseptic as the bichloride of mercury to be used after operations, and decidedly better for sutures.

It has neither aroused my enthusiasm, nor would I feel content to simply throw it overboard, until I have made further trials. That it is not all that Stilling claims for it, I am certain.—*Amer. Jour. Oph.*

The Memphis Journal of the Medical Sciences.

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EDITORIAL CORPS.

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Original articles and clinical reports solicited. Contributors are notified that all matter forwarded us, is received with the distinct understanding that said matter has never appeared in print, and will not be allowed to appear in any other journal prior to its publication in this.

Secretaries of medical and surgical societies will favor us by sending dates of regular meetings, with brief programme of important subjects coming before the meeting.

All matter must be in our hands on the tenth of the month preceding its publication.

The JOURNAL will be issued about the fifth of each month.

All communications should be addressed to

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TO OUR READERS.—With the present issue our journalistic year closes, and our second volume is completed. A review of the work accomplished shows that the field which we have attempted to cover has been well cultivated—that every branch of medicine has been fully represented, and that no important advance in any department has escaped notice. And we felicitate ourselves upon the happy division of labor among the editorial corps, which makes this possible with a minimum

amount of effort. The many kind expressions from our readers and contemporaries—for which we desire to express our thanks—show that our efforts are being appreciated, and the substantial assistance afforded by a constantly increasing subscription list and the liberal patronage of our advertisers, is one of our rewards. We have thus been able to reduce the subscription price, and furnish the best medical journal published in the Southwest, for $1 per year. With this record to refer to we bid adieu to the past year, and with the assurance that no effort will be spared to maintain the standard which we have adopted, we shall greet the coming one.

THE HEALTH OF MEMPHIS.—The Annual Report of the Board of Health of Memphis, through its President, Dr. W. B. Rogers, shows, on an estimated population of 60,000, a death rate of 22.4 per 1000. The mortality is greater among the negroes, who show a death rate of 26.14 per 1000, than among the whites, who have a death rate of 19.4 per 1000. The report is published elsewhere in this journal, and is worthy of careful perusal. Among the many pertinent suggestions made, none is more important nor so far reaching as that concerning the extension of the sewer system to the new territory, which is being rapidly added to, and becoming thickly populated portions of, the city. The city authorities need only recall the scenes of pestilence and disease of a decade since, and the good results which followed in the wake of sanitary improvements then instituted, to appreciate the dire effects of bad, and the benefits of good, sanitation. Good sewers and pure water are the foundation of the prosperity of Memphis today, and when either is neglected the city will retrograde, and its every interest will feel and show it.

That freedom from danger often begets lethargy, should be constantly borne in mind, and we should remember that the utmost diligence will be required at all times to ward off an unsanitary condition of the city. Especially important is this warning at the present time, when from various countries, with which ours bears intimate commercial relations, come reports of the prevalence, and spread of, the worst of epidemic diseases—cholera.

KOCH'S LIQUID.—The latest advices from Koch, January 15, are confirmatory of his previous statements concerning the clinical results of his treatment of tuberculosis, though he admits that under certain circumstances the tuberculosis process is promoted by his remedy. His long looked-for description of the liquid is also given. He describes it as a glycerine extract, from pure cultures of the tubercle bacillus, and claims that the precise nature of the active principle is at present unknown. He places it among the albuminoid derivatives, and estimates that the solution contains less than 1 per cent. of it.

He was led to his discovery by observing the effect of tubercle bacilli, living or dead, on tuberculous and non-tuberculous guinea pigs. Inoculation of the pure culture in a healthy animal caused a hard nodule to form at the seat of injection, which, after a time, ulcerated, and remained until death; whereas in the tuberculous animal no nodule formed, but the superficial tissue at the seat of inoculation necrosed and fell off. And he further found that these latter animals were much improved when injections were made of a weak glycerine extract of a pure cultivation of tubercle bacilli. With these data at hand his discovery was a certainty, and the production of the liquid was easily arrived at.

BOOK NOTICES.

A GUIDE TO THE PRACTICAL EXAMINATION OF URINE, FOR THE USE OF PHYSICIANS AND STUDENTS. By James Tyson, M.D., etc. Seventh edition. Published by P. Blakiston, Son & Co., Philadelphia.

This is an exceedingly useful book, and should be in the hands of every practitioner of medicine. The author deals with the subject fully and practically, and the publishers have done their part equally well. It is admirably gotten up, and profusely illustrated.

A COMPEND OF DISEASES OF CHILDREN, ESPECIALLY ADAPTED FOR THE USE OF MEDICAL STUDENTS. By Marcus P. Hatfield, A.M., M.D., etc. P. Blakiston, Son & Co., publishers, Philadelphia. $1.

This is an excellent book, admirably adapted to the uses of the medical student and busy practitioner. Concise, thorough, authoritative, it meets every indication.

The delay in the issue of this number of the JOURNAL is more than repaid by the improvement in its appearance, which caused it. It will appear in this garb, promptly, hereafter.

READING NOTICES.

A CASE IN POINT.—P. F. Hyatt, M.D., Lewisburg, Pa., says: A prominent manufacturer, Mr. T., living in New Jersey, consulted me some eighteen years ago in reference to certain distressing symptoms which to his mind presaged apoplexy. As two brothers of his had died recently of that disease with the same premonitory symptoms, I did not feel justified in saying that his fears were groundless.

Good feeders and torpid bowels told the story.

I ordered a large teaspoonful of Tarrant's Seltzer Aperient in half a tumbler of water before breakfast and his troubles soon disappeared, and he is living today hearty and well, and has often told me since that the Aperient saved his life.

* * *

CAMPHO-PHENIQUE IN AURAL PRACTICE.—W. R. Amick, M.D., Professor of Ophthalmology in the Cincinnati College of Medicine and Surgery; Professor of Ophthalmology and Otology in the Woman's Medical College, says: I have used Campho-Phenique in a number of cases of inflammation of the external auditory canal, both circumscribed and diffuse, and, in addition to its allaying the irritation and inflammatory symptoms, it has one especial point in its favor which is valuable even if it did not allay the inflammation, *i. e.*, its analgesic properties. It is the best remedy to allay pain in inflammatory conditions of the external auditory canal with which I am acquainted at the present time.

* * *

WE desire to call attention to the ad. of Sharp & Dohme. This sterling house is too well known to need commendation. Mr. Louis Dohme, the head of the firm, is one of the revisers of the U. S. Pharmacopœia, and connected with the Maryland College of Pharmacy. S. & D.'s products are of the highest standard of excellence.

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